# Dillingham Airport Master Plan

# **Appendices**





State of Alaska Department of Transportation and Public Facilities



**Draft** 



Prepared by:



June 2005

# APPENDIX A ACRONYM GLOSSARY

# Appendix A - Acronyms

AASP Alaska Aviation System Plan

AC Advisory Circular

ADEC Alaska Department of Environmental Conservation

ADF&G Alaska Department of Fish and Game

ADOT&PF Alaska Department of Transportation and Public Facilities

AFFF Aqueous Fire Fighting Foam

AFSS Automated Flight Service Station

AIP Airport Improvement Program

ALD Airport Layout Drawing

ANCSA Alaska Native Claims Settlement Act

ARC Airport Reference Code

ARFF Airport Rescue and Firefighting

ASDA Accelerate-Stop Distance Available

AST Aboveground Storage Tank

ASTM American Society of Testing and Materials

ASV Annual Service Volume

AWOS Automated Weather Observing System

BBAHC Bristol Bay Area Health Corporation

BRL Building Restriction Line

CERCLIS Comprehensive Environmental Response, Compensation, and Liability Act

Information System

CFR Code of Federal Regulations

CORRACTS Corrective Action Sites

CRSA Coastal Resource Service Area

CTAF Common Traffic Advisory Frequency

DF Direction Finder

DME Distance Measuring Equipment

GA General Aviation

EA Environmental Assessment

EPA United States Environmental Protection Agency

ERNS Emergency Response Notification System

FAA Federal Aviation Administration

FATO Final Approach and Takeoff Area

FBO Fixed Base Operator

FOD Foreign Object Damage

FSS Flight Service Station

GPS Global Positioning System

HIRL High-Intensity Runway Lights

IEA Initial Environmental Assessment

IFR Instrument Flight Rules

ILS Instrument Landing System

IRA. Indian Reorganization Act

LDA Landing Distance Available

LOC Localizer

LOC/DME Localizer/Distance Measuring Equipment

LUST Leaking Underground Storage Tank

MALSR Medium-Intensity Approach Lighting System with Runway Alignment Indicator

Lights

MIRL Medium Intensity Runway Lights

MITL Medium-Intensity Taxiway Lighting

MLS Microwave Landing System

MSL Mean: Sea Level

NDB Nondirectional Beacon

NOTAM Notice to Airmen

NPL National Priority List (EPA)

NTSB National Transportation Safety Board

ODALS Omnidirectional Approach Lighting System

OFA Object Free Area

OFZ Obstacle Free Zone

PCI Pavement Condition Index

PCPI Per Capita Personal Income

POFZ Precision Obstacle Free Zone

RAATS RCRA Administration Action Tracking System

RCRA Resource Conservation and Recovery Act (EPA)

REIL Runway End Identifier Lights

RPZ. Runway Protection Zone

RSA Runway Safety Area

RTM Revenue Ton Mile

RVR Runway Visual Range

SHPO State Historic Preservation Office

SRE Snow Removal Equipment

TACAN Tactical Air Navigation
TAF Terminal Area Forecast

TLOF Touchdown and Liftoff Area

TSA Transportation Security Administration

TSD Treatment, Storage, and Disposal

USDA United States Department of Agriculture

USDOT United States Department of Transportation

USFWS United States Fish and Wildlife Service

UST Underground Storage Tank

VASI Visual Approach Slope Indicator

VFR Visual Flight Rules
VHF Very High Frequency

VORTAC VHF Omnidirectional Radio Range with collocated TACAN

APPENDIX B
REFERENCES

# Appendix B - References

14 CFR Part 77, Objects Affecting Navigable Airspace

14 CFR Part 139, Certification & Operations - Land Airports Serving Certain Air Carriers

Alaska Department of Labor, Research and Analysis Section, Demographics Unit, *Alaska Population Projections: 1998-2018.* 

ADOT&PF, Dillingham Airport Runway Safety Area Practicability Study, March 2002.

ADOT&PF, Dillingham Airport Master Plan, December 13, 1985.

ADOT&PF, Engineering Geology and Soils Report, Dillingham Airport supplemental materials investigation. June 1980.

ADOT&PF, Engineering Geology and Soils Report, Dillingham Airport materials investigation. September 1980.

ADOT&PF, Engineering Geology and Soils Report, Dillingham Airport paving materials site investigation. Materials site 411-013-1. Project 53977. June 1986.

ADOT&PF, Engineering Geology and Soils Report, Dillingham Airport Spur Road materials investigation. Materials site 411-013-1. Project 53127. July 1986.

ADOT&PF, Geotechnical Investigation, Dillingham-Kanakanak Spur Road. Project 57978. October 1990.

ADOT&PF, Geotechnical report, general aviation expansion. Project 57978. May 1991.

ADOT&PF, Geotechnical report, Dillingham-Aleknagik road rehabilitation. Project STP-0410 (1)/51192. September 1997.

ADOT&PF, Land Occupancy Drawings (5 drawings) November 2001.

ADOT&PF, Debbie Fannon, Airport Revenue, FY 99-01.

ADOT&PF, Joleen Hankins, Airport Expenses, FY 00-01.

ADOT&PF/FAA Joint Use of DOT&PF Rural Airport Buildings. Policy 01.03.030. Effective May 26, 1998.

AirNav, Data for Village Airports – TOG, A63, 5A8, KEK, KNW, JZZ, A14, CLP, KKU, OZ3, 17Z, 5QN. November 30, 2001.

Air Transport Intelligence, Peak and weekly aircraft movement information, October 2001.

Alaska Central Express Press Release, Postal Decision Forces Healthy Airline to Seek Protection; Carrier pays off employees, obligations prior to filing. January 22, 2002.

Alaska Commercial Company, Dillingham Community Information, October 26, 2001

Alaska Department of Highways. Route Reconnaissance Report, Dillingham to Aleknagik. Project S-0422 (4). 1963.

Alaska Department of Highways, Materials Division. Supplemental Materials Investigation, Dillingham-Aleknagik. Project S-0422 (4). January 1968.

Alaska Department of Highways, Materials Division. *Materials Site Report, supplement to Dillingham-Kanakanak*. Project S-0422 (4)/B41022. January 1976.

Alaska Department of Labor, Research and Analysis Section, Demographics Unit, Alaska Population Projections: 1998-2018.

Alaska Department of Labor, Research and Analysis Section, Demographics Unit, Various Articles from Economic Trends.

Alaska Journal of Commerce, *Bypass mail limits could ruin some carriers*, November 12, 2001

Anchorage Daily News, Carriers split over mail plan. November 7, 2001.

Anchorage Daily News, Native population booms in state's 'biggest village'. October 27, 2001.

Boeing Commercial Airplane Group, Current Market Outlook, 2001.

Bristol Bay Times, Dillingham Flight Service Station to receive top FAA honors. December 20, 2001.

Christian Science Monitor, Alaska's bush pilots test future of navigation. January 8, 2002

Cohen, William, Survey – Dillingham Airport and Wood River Road. May 18-June 21, 2002.

Dale, Joan, Personal Communication. Alaska State Historic and Preservation Office. Anchorage. 2002.

Dynatest Consulting in association with Touchdown Engineering and R. Scott Gartin, PE, Statewide Pavement Management Engineer, 1998 Alaska Airport Pavement Condition Report, April 1999.

FAA Advisory Circular 150/5020-1, Noise Control and Compatibility Planning for Airports

FAA Advisory Circular 150/5060-5, Airport Capacity and Delay

FAA Advisory Circular 150/5070-6A, Airport Master Plans

FAA Advisory Circular 150/5300-13, Airport Design

FAA Advisory Circular 150/5325-4, Runway Length Requirements for Airport Design

FAA Advisory Circular 150/5340-1H, Standards for Airport Markings

FAA Advisory Circular 150/5360-9, Planning and Design of Airport Terminal Facilities at Non-Hub Locations

FAA Advisory Circular 150/5360-13, Planning and Design Guidelines for Airport Terminal Facilities

FAA Advisory Circular 150/5380-6, Guidelines and Procedures for Maintenance of Airport Pavements

FAA Advisory Circular 150/5390-2A, Heliport Design

FAA, Aerospace Forecasts FY2001-2012. March 2001.

FAA, Alaska Region, john.madden@faa.gov, Flight Tips for Pilots in Alaska, March 5, 1996.

FAA, Alaska Region, Regional Airports Plan, Fall 2000.

FAA Civil Aviation Registry, Aircraft Registrations, January 2002.

FAA DOT/VNTSC CY 2000 ACAIS Database, Enplanements by Individual Carrier for CY 2000.

FAA, FAA Order 5090.3C, Field Formulation of the National Plan of Integrated Airport Systems (NPIAS), December 4, 2000.

FAA, Flight Service Station Statistics, annual, monthly, daily in peak month, 1993-2001.

FAA, National Aeronautical Charting Office, *United States Government Flight Information, Publication Supplement, Alaska*, Effective September 6, 2001-November 1, 2001.

FAA, National Aeronautical Charting Office, *United States Government Flight Information Publication, US Terminal Procedures, Alaska, Effective September 6, 2001-November 1, 2001.* 

FAA, National Aeronautical Charting Office, United States Government Flight Information Publication, IFR Enroute High Altitude, Alaska, Effective September 6, 2001-November 1, 2001.

FAA, National Aeronautical Charting Office, *United States Government Flight Information Publication, IFR Enroute Low Altitude, Alaska*, Effective September 6, 2001-November 1, 2001.

FAA, National Ocean Service, US Department of Commerce, Obstruction Data Sheet, ODS 5166, Dillingham Airport, Dillingham AK, Surveyed June 1991.

FAA Office of Aviation Policy and Plans, FAA Long-Range Aerospace Forecasts, FY2015, 2020, and 2025, FAA-APO-01-3, June 2001.

FAA Office of Aviation Policy and Plans, Aviation Industry Overview, FY 2000, Mach 2001.

FAA OPSNET, Delays Report, 1990-2000.

FAA Study for the House and Senate Appropriations Committees, Aviation Access to Remote Locations in Alaska, Recommendations to Increase Aviation Access to Medical Facilities, House Report 106-940 accompanying HR 4475, FY 2001 DOT appropriations, May 2001.

FAA, Terminal Area Forecast, Fiscal Years 2001-2015, FAA-APO-00-7, December 2001.

FAA Air Traffic Activity Data System, Flight Service Station Statistics, annual, monthly, daily in peak month, 1993-2001.

Gartin, R. Scott, PE, Statewide Pavement Management Engineer, 2001 Alaska Airport Pavement Condition Maps, 2001.

Global Climatology Branch, AFCCC, Asheville, NC. Percentage Frequencyof Ceiling vs Visisbility from Hourly Observations, Station 703210 Dillingham AK. December 1972-December 1997.

Hillstrom, Erik, *Grave danger: Construction near Orthodox graves too close for some.* Bristol Bay Times, August 22, 2002.

Hillstrom, Erik, Meeting focuses on airport alternatives, public weighs in. Bristol Bay Times, August 29, 2002.

Komarnitsky, S.J. and Lucas Wall, *Plane Crash Kills Nine*. Anchorage Daily News, October 11, 2001.

Loy, Wesley. Grim forecasts nag Bristol Bay. Anchorage Daily News, November 14, 2001.

Loy, Wesley. Forecasts expected to see disaster. Anchorage Daily News, November 13, 2001.

Lutman, T.A. Materials site report, supplement to Dillingham-Kanakanak, project S-0411 (4)/B41022. Prepared for Alaska Department of Highways, Materials Division. January 1976.

Mertie, I.B. Jr. The Nushagak District, Alaska. USGS Survey Bulletin 903. 1938.

Nelson, W. J. and Associates. Soils investigation report, Dillingham airport sewer. November 1989.

Nicholson, William H. Sunken Gillnets: Fishing in Bristol Bay, Alaska. 1996.

NTSB, NTSB Accident Records, 1983-2002.

Selkregg, no date. Alaska Regional Profiles, Southcentral Region; by L.L. Selkregg, editor; Published by University of Alaska, Arctic Environmental Information Data Center; for State of Alaska Office of the Governor (Hammond) and the Joint Federal-State Land Use Planning Commission for Alaska.

State of Alaska, Department of Highways, *Materials Reconnaissance FAS 411 to Kanakanak, Mile 3.6-6.1.* Project S-0411 (4). November 1968.

State of Alaska, Office of the Governor, Alaska Regional Profiles, Volume III, Southwest Region.

Stern, Charla, Personal Communication. U.S. Fish and Wildlife Service. Threatened and Endangered Species Division. Anchorage. 2002.

TRA-BV Airport Consulting for ADOT&PF, Alaska System Aviation Plan Update: Report, Appendices and Executive Summary, March 1996.

Tryck Nyman & Hayes, City of Dillingham Comprehensive Plan, 1985.

United States Code, Title 39 Postal Service, Part V Transportation of Mail, Chapter 54 Transportation of Mail by Air, printed November 27, 2001.

US Census Bureau, Population Projections by State, 1995-2025.

USDA, *Exploratory Soil Survey of Alaska*, U.S. Department of Agriculture, Soil Conservation Service, February 1979.

USDA Soil Conservation Service, Soils of the Dillingham Area, 1965.

USDOT, Bureau of Transportation Statistics, Office of Airline Information, Airport Activity Statistics of Certificated Air Carriers Summary Tables, 12 months ending December 31, 2000.

USDOT, Data Base Products, *T-3*, *T-100*, and Commuter Aviation Activity Data, 1990-2001 partial.

USFS, Ecological Subregions of the United States. Prepared for the USFS. 2001.

USPS, Intra-Alaska Mail Service by Air: Instructions for Certificated Carriers and Bypass Shippers, Handbook PO-508. January 2000.

Vista, 2002. *Dillingham Airport, Dillingham AK, 99576.* Vista Information Solutions, Inc., Report ID 501501901. January 10, 2002.

Welch, Laine. The Alaska Fish Factor, Brought to you by Klukwon, Inc. Eagle Eye News. May 4-10, 2002.

Western Regional Climate Center, *Dillingham FAA Airport Monthly Climate Summary*, December 2, 1951-November 30, 2000.

# **APPENDIX C**

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# DILLINGHAM AIRPORT MASTER PLAN SCOPING & PUBLIC INVOLVEMENT PLAN

AKSAS Project No. 54742

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November 2001

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## 1.0 INTRODUCTION

The Alaska Department of Transportation and Public Facilities (DOT&PF) is developing an airport master plan for the Dillingham Airport. The proposed project will produce the following documents:

- An Airport Master Plan.
- An Environmental Assessment.
- An Airport Layout Pian.

DOT&PF has retained ASCG Incorporated (ASCG) to lead the planning effort. As a part of the project, Travis/Peterson Environmental Consulting, Inc. (TPECI) is performing the environmental study.

The Dillingham Airport is located at the extreme northern end of Nushagak Bay. Nushagak Bay is the northern part of Bristol Bay at the confluence of the Wood and Nushagak Rivers. The airport lies about 327 miles southwest of Anchorage. The community has no roads that connect to the continental roadway network. Dillingham serves as a regional aviation and marine hub for the villages in the northern Bristol Bay area. Dillingham provides food, fuel, medical care, and other services to these villages.

### 1.1 PURPOSE

The purpose of this study is to recommend actions to correct safety and capacity deficiencies; identify facilities required to service existing and future air traffic demand; and develop a phased implementation plan to improve the airport to meet forecasted needs for the next twenty years. Alternative development concepts will be evaluated and presented to airport users and local residents to identify the preferred development alternative.

### 1.2 PROJECT NEED

As with many rural villages, communities of Bristol Bay rely on air transportation as the community's lifeline for passenger, cargo, mail, and medivac services. Dillingham needs a superior airport to provide urgent medical evacuation services to area residents during times of poor weather and short daylight hours.

# 1.3 ECONOMIC BENEFITS

Dillingham is the economic, transportation, and public service center for western Bristol Bay. Commercial fishing, fish processing, cold storage, and support of the fishing industry are the primary activities. During the spring and summer, the population doubles. The city's role as the regional center for government and services helps to stabilize seasonal employment. Many residents depend on subsistence activities and trapping.

### 2.0 SCOPING PLAN

The purpose of this scoping plan is to:

 Define the methods and strategies the consultant team plans to use to collect existing data and information.

- Identify proposed sources of historical information.
- List specific information to be collected during the field reconnaissance trip.
- Provide a schedule for completing the scoping efforts.

The scoping process determines the important engineering and environmental issues upon which the rest of the project builds. A thorough scoping process is critical to the success of the project. This process streamlines the environmental assessment by allowing the analysts to concentrate their efforts on subjects of concern. Agency scoping will be completed to provide information on the proposed project and obtain information that will aid in the assessment of impacts. Agency contacts for follow-up consultation will be identified. The scoping process also allows agency personnel to commit resources and information to the environmental process.

The engineering components of the scoping process will be completed to provide a comprehensive background to assist with defining the facility requirements and subsequent development and evaluation of alternatives to meet the facility needs.

The scoping process will result in a document summarizing the project purpose and need as well as reasonable alternatives for further review during the Environmental Assessment process.

# 2.1 PUBLIC INVOLVEMENT PLAN

The purpose of the Dillingham Airport Master Plan Public Involvement Plan is to ensure that the public and state and federal agencies are informed about the project. The public involvement plan will serve as a guide for gathering relevant information that can be used in project development. Critical milestones and some of the techniques that will be used to gather information and local knowledge are listed below.

### 2.2 Public Involvement Tasks

The following list of tasks ensure that adequate notice of meetings is provided, milestones are met, and that team members understand what needs to happen to make the project flow efficiently and effectively.

# 2.2.1 Task 1 - Develop Project Website

A project website will be established and maintained throughout the project which will keep the public informed of the latest developments in the master plan and environmental assessment process. The project website will also provide contact information for the transmitting of comments. The project web pages will be linked to the DOT&PF website on the Project Information/Public Notices page. The site will be maintained by ASCG and updated as the project moves forward. To the extent possible, the distribution of documents for the public will be done electronically from the website.

### 2.2.2 Task 2 - Establish Airport Advisory Committee

An airport advisory committee will be established to bring together representative interests. The committee shall be made up of at least six members including the DOT&PF, Airport Manager, FAA Airport Planner, City Manager, two air carrier representatives, and a member of the community at large. Members will primarily function as technical advisors in an informal and advisory role. Meetings shall be in person, via teleconference or via email correspondence. Meeting dates and locations shall remain flexible. The advisory committee shall participate in the review of draft work products.

# Other Issues Identification Efforts Before and During Initial Public Meeting

- 1. Distribute issue surveys and air carrier/air taxi questionnaires to solicit views of agencies, organizations, and the public and to inform these groups of the proposed master planning project.
- 2. Conduct oral interviews with stakeholders as necessary.

# 2.2.4 Task 4 - Public Meeting Number Two (Alternatives Development)

# **Preparation of Public Meeting Number Two**

- 1. Identify and schedule meeting room in Dillingham for an alternatives requirement public meeting to present the forecasts, demand capacity and solicit ideas on potential alternatives.
- 2. Update mailing list for next phase.
- 3. Prepare and distribute public service announcements and advertisements for the introductory public meeting to the *Bristol Bay Times* newspaper.
- 4. Prepare and distribute public service announcement for Nushagak Electric and Telephone Cooperative Cable TV and KDLG radio station.
- 5. Make presentation graphics and handouts.

# **Public Meeting Number Two**

 Hold an open house and conduct a public meeting in Dillingham. The intent of the meeting is to present the forecast, demand capacity and requirements analysis, and solicit ideas on alternatives from the public. This information will be used in the development of Technical Memorandum Number Two.

# **Post-Public Meeting**

- 1. Evaluate meeting results and comments received.
- 2. Prepare draft meeting summary for DOT&PF review and compile an attendance list.
- 3. Prepare final meeting summary for distribution to DOT&PF.
- 4. Revise mailing list based on meeting results and requests.
- 5. Review schedule for changes; prepare revised schedule if appropriate.

### 2.2.5 Task 5 - Environmental Scoping

# **Preparatory Tasks**

- 1. Review NEPA scoping notice requirements. Review and finalize newsletter with DOT&PF.
- 2. Develop a newsletter describing the alternatives under consideration.
- 3. Review and finalize newsletter with DOT&PF.
- 4. Distribute project newsletter to mailing list.
- 5. Post project newsletter on website.
- 6. Identify and schedule meeting room in Dillingham for a NEPA scoping meeting to present draft airport master plan alternatives.
- 7. Identify and schedule meeting room in Anchorage for agency NEPA scoping meeting to present draft airport master plan alternatives to agencies.
- 8. Update mailing list for next phase.
- 9. Develop and distribute scoping kickoff newsletter.
- 10. Produce graphics, newspaper announcements, mailers, etc in advance of meeting.
- 11. Notify airport advisory committee by mail of the scoping meetings.

- 12. Prepare and distribute public service announcements and advertisements for the public scoping meeting to the *Bristol Bay Times* and *Anchorage Daily News* newspapers.
- 13. Prepare and distribute public service announcement for Nushagak Electric and Telephone Cooperative Cable TV and KDLG radio station.

# Public Scoping Meeting in Dillingham

- 1. Conduct a public EA scoping meeting to present the conceptual alternatives. Use an open house format with the inclusion of a presentation during a portion of the open house.
- 2. During the open house, a presentation would be given to describe the specific means for alternatives identification and the process of considering them in the EA.

# Agency Scoping Meeting in Anchorage

- 1. Prepare agency invitation letter for DOT&PF review and comment.
- 2. Send agency invitation letter to agencies.
- Respond to any requests for additional information in advance of the meeting.
- 4. Forward agency comments or questions to other team members and DOT&PF for review prior to meeting.
- 5. Conduct an agency scoping meeting to present the draft master plan alternatives.

# **Post-Scoping Meeting Task**

- 1. Evaluate meeting results and comments received.
- 2. Prepare draft meeting summary for team and DOT&PF review and compile an attendance list.
- 3. Prepare final meeting summary for distribution to team, DOT&PF, and others upon request.
- 4. Revise mailing list based on meeting results and requests.
- 5. Review schedule for changes; prepare revised schedule if appropriate.

# 2.2.6 Task 6 - Public Hearing (If Necessary)(Public Meeting Number Four)

- 1. Prepare "notice of availability of draft EA and opportunity for public hearing".
- 2. Review public notice with DOT&PF.
- 3. Publish notice in local paper and Anchorage Daily News.
- 4. Identify and schedule meeting room in Dillingham for an EA public hearing to present draft airport master plan alternatives.
- 5. Identify and schedule room in Anchorage for agency EA public hearing to present draft airport master plan alternatives to agencies.
- 6. Update mailing list for next phase.
- 7. Produce graphics, newspaper announcements, mailers, etc. in advance of meeting.
- 8. Notify airport advisory committee by mail and web site of the public hearing.
- 9. Prepare and distribute public service announcement for KPBI radio station.
- 10. On-going coordination with local, state, and federal agencies regarding the EA.

# **Meeting Graphics and Handouts**

The following meeting graphics and handouts are representative of the types of meeting graphics anticipated for public meetings.

- 1. Project development process
- 2. Master plan schedule

# 5.0 PROJECT TEAM COORDINATION LIST

**CONTRACTING AGENCY** 

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# Dillingham Airport Master Plan Combined Mailing List

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Alice	Ruby	Dillingham City Council	P.O. Box 889	Dillingham /	AK	99576
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Andy	Anderson	Bristol Bay Housing Authority	P.O. Box 50	Dillingham /	AK	99576
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Dennis	Olson	Olsonville, Inc.	P.O. Box 537	Dillingham AK	99576
Hjalmar	Olson	Bristol Bay Native Corporation	P.O. Box 100220	Anchorage AK	99510
Ida	Roehl	Planning Commission	P.O. Box 889	Dillingham AK	99576
Alice	Ruby	Choggiung Ltd.	P.O. Box 330	Dillingham AK	99576
Eileen	Savo	Dillingham School Board	P.O. Box 889	Dillingham AK	99576
Tom	Schlagel		P.O. Box 714	Dillingham AK	99576
Gordon	Shaw	LSC Transp. Cons.	P.O. Box 8575	Tahoe City CA	96145
Ralph	Sorensen	SC&G Inc.	P.O. Box 173	Dillingham AK	99576
Jon	Sorensen	City of Dillingham	P.O. Box 889	Dillingham AK	99576
David	Stokes	City of Dillingham	P.O. Box 889	Dillingham AK	99576
Geoff	Straw	LSC Transp. Cons.	P.O. Box 8575	Tahoe City CA	96145
Richard	Thompson	ADNR, Div. Mining, Land & Water	P.O. Box 1170	Dillingham AK	99576
Tom	Tilden	Choggiung, Ltd.	P.O. Box 330	Dillingham AK	99576
Keggie	Tubbs	Dillingham City Council	P.O. Box 889	Dillingham AK	99576
RaeBelle	Whitcomb	Planning Commission	P.O. Box 889	Dillingham AK	99576
Ed	Willis	Planning Commission	P.O. Box 889	Dillingham AK	99576
Victor	Willis	Planning Commission	P.O. Box 889	Dillingham AK	99576
Dorothy	Wilson	Bristol Bay Economic Development Corp.	P.O. Box 1464	Dillingham AK	99576
Kenny	Wilson	Dillingham School Board	P.O. Box 889	Dillingham AK	99576
		ACS Fuels LLC	P.O. Box 251	Dillingham AK	99576
		Armstrong Air Service, Inc.	P.O. Box 204	Dillingham AK	99576
		Bristol Bay Air Service, Inc.	P.O. Box 1135	Dillingham AK	99576
		City of Dillingham	P.O. Box 889	Dillingham AK	99576
		Delta Western .	1007 W. Third Avenue, Suite 303	Anchorage AK	99501-1936
		FAA Real Estate and Utilities Branch	222 W. Seventh Avenue, #14	Anchorage AK	99513-7587

# Appendix C - Public Involvement Plan & Materials

# Dillingham Airport Master Plan Combined Mailing List

Freshwater Adventures, Inc.	P.O. Box 190875	Anchorage AK	99519
Glacier Fuel Company, Inc./Bristol Fuels	P.O. Box 1529	Dillingham AK	99576
Grant Aviation, Inc.	P.O. Box 92200	Anchorage AK	99509-2200
Peninsula Airways, Inc.	6100 Boeing Avenue	Anchorage AK	99502
Starflite, Inc.	P.O. Box 842	Dillingham AK	99576
Togiak Transportation Services, Inc.	P.O. Box 149	Togiak AK	99678
Tucker Aviation, Inc.	P.O. Box 1109	Dillingham AK	99576
LLS Fish and Wildlife Service Contracting	and 1011 Fast Tudor Boad	Anchorage AK	99503-6199



# Airport News

# The Project

The Department of Transportation and Public Facilities has funded an Airport Master Plan for the Dillingham Airport. To complete the plan, they selected the Anchorage based engineering consulting firm of ASCG Incorporated.

The Master Plan for Dillingham will examine issues such as:

- Runway and Safety Area. Pavement is failing, and the runway safety area - the level ground around the runway - is smaller than required by FAA. Pavement rehabilitation is programmed for 2003.
- Need for a Parallel Taxiway. The need to back-taxi on the runway results in traffic congestion at busy times.
- Runway Line-of-Sight. A hump in the middle of the runway prevents pilots at either end from seeing the other end.
- Fencing. Foxes and dogs can get inside the runway fencing, creating a hazard for aviation.
- Vehicle Parking. The amount of longterm parking for vehicles inadequate.
- Aircraft Parking. There may inadequate apron area for large transient
- **Crosswind Runway**. A secondary runway for use during strong crosswind conditions may be warranted.
- Wetlands Protection. Adjacent wetlands may restrict airport development.
- Flight Service Station Access. The Flight Service Station is in a fenced-off area, within leased space on the second story of the Reeve Aleutian Terminal.

# **Looking for Airport Planners**

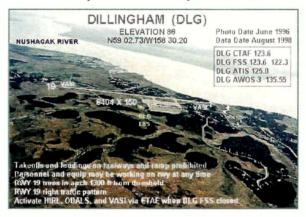
Interested in taking a more active role in the development of the airport master plan by serving on the airport advisory committee? The committee will review the plan as it develops and will meet via teleconference or in person throughout the course of the project.

Typically airport master plans include a detailed inventory of existing conditions, forecasting, an analysis of the demand and capacity, an analysis of reasonable alternatives, an environmental assessment, airport layout plans and an implementation plan. The airport advisory committee will provide comments on these sections and can help set the direction of the airport plan.

If you are interested, please call one of the numbers listed on the back of this newsletter or attend the meeting on November 14th and sign up.

# **Public Meeting**

- WHY: Discuss current and future needs at the airport
- WHERE: Dillingham City Council Chambers
- WHEN: 7 9 p.m., Wednesday, November 14, 2001



If you have hearing impairments, please call ADOT&PF's Telephone Device for the Deaf (TDD) at (907) 269-0473 to arrange assistance. For other special needs, call Jonathan Widdis with ASCG at 1-800-478-4153. ADOT&PF Project #54742.

# Dillingham Airport Master Plan Update

Open House



and

**Public Meeting** 

7:00 pm - 9:00 pm

Wednesday, November 14, 2001

Dillingham City Council Chambers

Come and tell us your thoughts about airport improvements.

Jonathan Widdis ASCG Incorporated (907) 267-6301

Mark Mayo Alaska DOT&PF (907) 269-0519

# Dillingham Airport Master Plan Open House and Public Meeting

Discuss current and future needs of Dillingham Airport. 7-9 p.m. Wednesday, November 14, 2001 At the Dillingham City Council Chambers.

If you have hearing impairments, please call ADOT&PF's Telephone Device for the Deaf (TDD) at (907) 269-0473 to arrange assistance. For other special needs, call Jonathan Widdis with ASCG at 1-800-478-4153. ADOT&PF Project #54742.

# **Anchorage Daily News** Affidavit of Publication

11/14/200

1001 Northway Drive, Anchorage, AK 99508

<u>AD#</u>	DATE	<u>PO</u> ,	ACCOUNT	PRICE PER DAY	OTHER CHARGES	OTHER CHARGES #2	GRAND TOTAL
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# STATE OF ALASKA THIRD JUDICIAL DISTRICT

Lorene Soliyan, being first duly sworn on oath deposes and says that she is an advertising representative of the Anchorage Daily News, a daily newspaper.

That said newspaper has been approved by the Third Judicial Court, Anchorage, Alaska, and it now and has been published in the English language continually as a daily newspaper in Anchorage, Alaska, and it is now and during all said time was printed in an office maintained at the aforesaid place of publication of said newspaper. That the annexed is a copy of an advertisement as it was published in regular issues (and not in supplemental form) of said newspaper on the above dates and that such newspaper was regularly distributed to its subscribers during all of said period. That the full amount of the fee charged for the foregoing publication is not in excess of the rate charged private individuals.

Signed

Subscribed and sworn to me before this date:

Notary Public in and for the State of Alaska. Third Division. Anchorage, Alaska

MY COMMISSION EXPIRES:

Discuss current and future needs of Dillingham Airport. 7-9-p.m. Wednesday, November 14, 2001. At the Dillingham City Council Chambers

If you have hearing impairments, please call ADOT&PF's Telephone Device for the Deaf (TDD) at (907) 269-0473 to arrange assistance. For other special needs call Jonathan Widdiswith ADOT&PF Project #, 54742

Published: November 1

Published November 11, 14, 2001

# Dillingham Airport Master Plan

November 14, 2001 Public Meeting

Name BUTCH WOUTHIT  Organization DOT - PF  (if any)  Address DOUTHIT @DOT. STATE.A	✓Name TANK TAYO  Organization NOT 4 AF  (if any)  Address
VName Brad Sworts  Organization ADOT-PF (if any) Address	Name <u>CORDON SHAL</u> Organization <u>LSC Trans Cons</u> (if any) Address <u>POSB75</u> Talve City, CA 96145
Name Charles Mayor  Organization Res. (if any) Address Box 19 C  Mg Ak 9957 C	Name Geoff Straw Organization LSC Transp. (if any) Address PO Box S875 Takee City, CA 96145
Name Alice Ruby Organization Chaggians (if any) Address Box 330  Dy Ax 99576	NameCAL Johnson Organization
Name Brad Hinkes  Organization Pen Air (if any) Address P. O. Box 1062  Dillingham, Alc 99576	Name X NORMAN HEYAND  Organization DOS  (if any) Address P.O. Bix 250  Dillingham, AK 99576

# Dillingham Airport Master Plan

November 14, 2001 Public Meeting

Name Erele Hillstrorm  Organization Bristol Boy Times (if any) Address Po box 1770  Dillighan, AK 99576	Name John C. Marx  Organization  (if any)  Address P.O. Box 1.361  Dillingham, Ak 9.9576
Name Dan Layland Organization City of Dlq. (if any) Address Bx 421 Dly AK.	Name 'Raiph Sarenseu  Organization & CSG Sarenseushightera (if any) Address Box 173  Dillingham H& 99576
Name BO DAKORN  Organization A lASKA CARGO SERVINER (if any) NORTHER AND CARGO Address AND CARGO EXPRESS PO BOX 251  Diff No care A Sigs 26	Name Charles Gillespie Organization Plainsula Linuarys (If any) Address PO Box 1232 Dillingham, AL 99576.
Name John O Counce Organization (if any) Address P.O Box 857 Dillingham AK, 99576	Name John Forton  Organization GT+ OF Duringum  (if any)  Address BB9  DILLINGHAM AR 99876
Name Rob Corpenter  Organization	Name <u>Saa Funk</u> Organization <u>ASCG</u> (if any) Address <u>Ancharage</u> AK

# Dillingham Airport Master Plan

November 14, 2001 Public Meeting

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NORMAN HEYANO	(if any)	Planning Director	
DILLINGHAM AIRPORT MANAGER	Address_l		
BOX 250	:	P.O. Box 889	
DILLINGHAM, AK 99576 OFFICE; (907) 842-55; 1		141 Main Street	<del></del>
STATE OF ALASKA HOME: (907) 842-2733	:	Dillingham, Alaska 99576	
DEPARTMENT OF TRANSPORTATION OFF. FAX: (907) 842-301 1  8 PUBLIC FACILITIES HM. FAX: (907) 842-3050		Phone (907) 842-3785 Fax (907) 842-2060	
840-7133 mobile		planning@nushtel.com	
Name	Name _	•	
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MARK MAYO	:		
TRANSPORTATION PLANNER	:		
P.O. BOX 196900 4111 AVIATION AVENUE	•		
ANCHORAGE, AK 99519-6900	Name		
STATE OF ALASKA (907) 269-0519 DEPARTMENT OF TRANSPORTATION FAX (907) 269-0521	•		
AND PUBLIC FACILITIES E-MAIL: mark_mayo@dot.state.ak.us			
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The Spirit of Alaska	Name		
MICHAEL BRAD HINKES			
Dillingham Station Manager	Organization_		
PENINSULA AIRWAYS, INC.	(if any)		
DILLINGHAM OFFICE	Address		
P.O. Box 1062 Dillingham, AK:99576	•		
Phone (907) 842-5559			<del></del>
Fax (907) 842-5768			
Brad. Hinkes 6 Alaskacir. com			

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FAA Flight Service Station Supervisor 470 N. Willow Kenai, AK 99611 907/842-5275 Phone (DLG FSS) 907/283-3735 Fax (Kenai FSS) 907/283-4391 (fax) JR.Miller@ffa.gov Viewpoint: FAA Operations

### **Jack Moores**

Bristol Bay Native Corporation 800 Cordova Street, Suite 200 Anchorage, Alaska 99501-6299 907/278-3602 (phone) 907/276-3924 (fax) moorsj@bbncc.net Viewpoint: Local Industry

### John O'Connor

City of Dillingham
P.O. Box 852
Dillingham, Alaska 99576
(907) 842-5211
Viewpoint: City of Dillingham

# Dillingham Airport Master Plan

# INTERESTED IN JOINING THE ADVISORY COMMITTEE?

(You will be asked to review three draft master plan and environmental assessment reports and provide written feedback on their content.)

***************************************	
Name Dan Lay (and Viewpoint Represented Dilot / City of Uts.  Address Bx 421  Dlg AK 99576  Phone 907-842-7335  Fax 907-842-1338  Email	Name         Viewpoint Represented         Address         Phone         Fax         Email
Name Rob Corporter  Viewpoint Represented Pilot GA  Address PO Box 70/  Dillingham, Ak 99576  Phone 842-5134  Fax 842-5645  Email robo dest.kiz.ak.us	Name Viewpoint Represented  Address  Phone  Fax  Email
Name John Marx Viewpoint Represented Passenger/City MOP Address P.O. Box 1361  DLG, An 99576  Phone 1967-842-4742  Fax  Email Sonjohng @ Nurhtel. Com	Name Viewpoint Represented  Address  Phone  Fax  Email

# Searching for ideas

# ASCG seeks public input on airport plan

By Erik Hillstrom

**Bristol BayTimes** 

Teaming up with the Alaska Department of Transportation, Anchorage-based engineering firm ASCG will hold a public meeting inviting the public's input for Dillingham's Airport Master Plan on Nov. 14.

Seeking ideas, thoughts and concerns for our local airport, ASCG appears to have an "open ear" policy for the upcoming project. Funded by DOT, the project was designed to bring upgrades to our local airport while also improving facilities and services.

"We will have an 'open house' meeting for the public," said—Jonathan Widdis, project manager for ASCG. "Our company, and state people will attend. Basically, we will be looking for public input, you can never get too much input."

Already touting a healthy list of issues for the local facility, the meeting will be the first in a series that also allows for locals to participate on an airport advisory committee. Typically airport master plans include a detailed inventory of existing conditions, forecasting, an analysis of demand and capacity, an analysis of reasonable alternatives, an environmental assessment, airport layout plans and an implementation plan. The airport advisory committee will provide comments on these sections and can help set the direction of the airport plan.

"This will be the first meeting,"

See Airport, page 13

# Bristol Bay Timestary, November 8 2001

Thursday, November 8, 2001

The Bristol BayTimes

# Airport ...

### From page 1

Widdis said. "We'll be at the ground floor, so everything will be new and fresh. I also think this is perfect timing. There are no preconceived ideas. It will be our first look at it on ground-level."

Building a well-deserved reputation of encompassing rural issues into their work, ASCG specializes in designing projects for harsh climates such as here in Southwest. Widdis said this was due, again, to local input and respecting that advice.

"In rural areas, we always have different issues to contend with," Widdis said. "One thing we know we have in Dillingham is the grave-yard that sets next to the runway. That's why it is our goal to explain the process we will go through, and also explain how we will use peo-

ple's thoughts and incorporate them into the project."

An improvement opportunity for a rural community such as Dillingham does not come along every fiscal year. The subject of the meeting even made its way into discussion at last week's city council meeting.

"I just wanted to remind everyone on the council about the Airport Master Plan meeting on November 14," said John Fulton, newly selected city manager. "It's the first meeting, and it looks like this could be a huge opportunity for local people to have a say in the airport facilities, and the direction of the airport in the future. After all, these are facilities which we all use."

Pavement rehabilitation to

increase runway size, the need for a back-taxi parallel runway, removing a 'hump' in the runway which affects sight, the need for runway fencing, more adequate long-term parking facilities, increased area for aircraft parking, a secondary runway to be used during harsh crosswinds, protection of adjacent wetlands and increased access to the flight service station are the base issues for the master plan. Other topics such as long-range development and operation would also be open to discussion.

"We have to have a good plan to be successful," Widdis said. "But in order to do that, we need input from everyone. This meeting will allow us to take everyone's ideas into account."

# Bristol Bay Times



# Public speaks on airport plan

By Erik Hillstrom

Bristol BayTimes

Alaska Department of Transportation and Public Facilities officials, as well as representatives from engineering firm ASCG were in town last Wednesday to discuss issues for Dillingham's Airport Master Plan with the community.

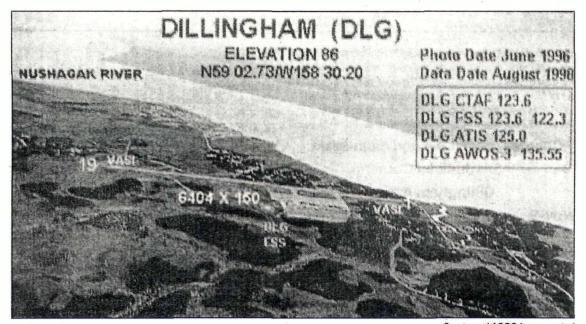
Combining issues that remained from the last master plan prospectus done in 1985, as well as issues that have come up since then, the transportation department and ASCG were looking for input from local people that use the facilities.

Subjects of discussion ranged from relocation of the entire facility and movement of existing buildings to a potable water system and a central terminal facility. The presenters also noted that while the process would take time, it would work to bring Dillingham into compliance with ever-tightening Federal Aviation Administration standards.

"Doing a complete study identifying the issues faced here should take about two years," said Jonathan Widdis, project manager for ASCG. "That portion, as well, is funded by the FAA, and it is somewhat prescribed in the way the process is done. However, the finished product will then be eligible for federal funding. We are trying to plan for 20 years into the future, as all master plans do. We also make revisions to the plan every five years, to deal with what effect population growth and economic events may have."

Through discussion of locals in attendance, the No. 1 priority seemed to be the need for a parallel taxiway, a paved strip parallel to the

See Airport, page 9



Courtesy of ASCG Incorporated Alaska Department of Transportation and Public Facilities officials and representatives from the Native-owned engineering firm ASCG heard public testimony last Wednesday regarding Dillingham's Airport Master Plan.

# Airport ...

### From page 1

runway, for air traffic holding on the ground.

"I've seen up to a dozen planes back-taxi on our runway," said Norman Heyano, resident and transportation department foreman. "On really bad weather days everyone is stacked up, and it's a mess."

Another issue of high priority was dealing with an alleged 'bump' or 'rise' in the middle of the runway that prevented a clear line of sight from one end to the other. Local air carrier Bo Darden clarified the situation.

"It's not a bump — the north end of the runway is low," Darden said. "It's sloping down. When we were first using the runway, from one end you could see the undercarriage of a 737, now you can barely see the top three feet of the tail."

Resident Charles Mayer agreed that the runway's north end had been sinking for some time.

"It has sunk at least seven feet," Mayer said. "I drove truck on the runway project, and sitting in a truck on Wood River Road, all you could see was high embankments, the runway lights were blocked. Now you can see all the way across the runway."

Defining local issues took first priority. ASCG representative Sara Funk reminded the crowd of the priority of widening safety zones requested by the FAA. The increases would cut it close for one of Dillingham's graveyards, which borders the landing strip.

"FAA states the safety line is 250 feet from the centerline of the runway," Funk said. "The problem comes with the graveyard."

While all in attendance agreed no one was anxious to discuss movement of a cemetery, Funk reminded the crowd of another dismal possibility.

"I know this is something no one here wants to think about, but another option is to downgrade the aircraft that use the runway. Meaning you would most likely lose 727 and 737 jets."

"I don't think we want to lose our jet service," Mayer said.

Widdis reminded those in attendance that there were always possibilities and compromises could be found, even with the FAA. "After completing the study phase, we will have a lot more information. Some parts of the project could be deemed too expensive to ever be done. So the FAA may back off and re-look at those things."

Upon prioritizing needs, resident Dan Layland commented that while some items seemed obviously important, a good master plan had to include all aspects of renovation.

"I think it's important we don't lose sight of the total project. It's not just about runway improvement and a taxiway. That's why it's a master plan. All of the issues need to be addressed, so that if money from other sources becomes available for other aspects of the project, like a water/sewer system or road upgrades, etc., we have a plan and are ready to go."

The next airport master plan public meetings in Dillingham are scheduled for summer and fall of next year.

# DILLINGHAM AIRPORT MASTER PLAN

# Presentation and Public Meeting



6:00 pm - 8:00 pm

Thursday, August 22, 2002

Dillingham City Council Chambers

Come learn about airport forecasts and future facility requirements. Share your input on future airport needs.

Jonathan Widdis ASCG Incorporated (907) 267-6301 Mark Mayo Alaska DOT&PF (907) 269-0519 003/003-0400

35342



P.O. Box 350 Dillingham, AK 99576 907-842-5251 or 907-842-5295 Facsimile: 907-842-2799 PAGE

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ASCG INCORPORATED ATTN: JONATHAN WIDDIS 301 ARCTIC SLOPE AVE. ANCHORAGE AK 99518-0301



Thursday August 22, 2002

#### Dillingham Airport Master Plan Presentation & Public Meeting

Forecasts and future airport facility requirements will be presented. The public is invited to participate in defining future airport needs. 6-8 P.M. Thursday, August 22, 2002

At the Dillingham City Council Chambers.

If you have hearing impairments please call ADOT&PF's Telephone Device for the Deaf (TDD) at (907) 269-0473 to arrange assistance. For other special needs, call Jonathan Widdis with ASCG at 1-800-478-4153.

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#### AFFIDAVIT OF PUBLICATION

UNITED STATES OF AMERICA, STATE OF ALASKA, THIRD DIVISION. BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC THIS DAY PERSONALLY APPEARED AGNES L. JAMES WHO, BEING FIRST DULY SWORN, ACCORDING TO LAW, SAYS THAT SHE IS THE BILLING CLERK OF THE BRISTOL BAY TIMES PUBLISHED AT ANCHORAGE IN SAID DIVISION THREE AND STATE OF ALASKA AND THAT THE ADVERTISEMENT, OF WHICH THE ANNEXED IS A TRUE COPY, WAS PUBLISHED IN SAID PUBLICATION ON 8/22/02 AND THEREAFTER FOR A TOTAL OF 1 CONSECUTIVE ISSUE(S), THE LAST PUBLICATION APPEARING ON 8/22/02 AND THAT THE RATE CHARGED THEREON IS NOT IN EXCESS OF THE RATE CHARGED TO PRIVATE INDIVIDUALS.

AGNES L. JAMES
BILLING CLERK, ALASKA NEWSPAPERS

WORN TO ME BEFORE ON 9/5/02

BONNIE L. JACK

MY COMMISION EXPIRES ON 08/15/03

## DILLINGHAM AIRPORT MASTER PLAN

AUGUST 22, 2002 PUBLIC MEETING #2

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Organization Paivata (if any)	Name John Dennett Us  Organization  (if any)
Address Bx 1589  Dillinghan AK 99576	Address Po Box 372 DIGAK  1300 Lecod River R)
Name William in Jennyson Organization Private (if any) Address Box 750  Dillingham, At 99576	Name NICK + KATI BAGGEREN  Organization (TY Uff, LUNGHAM  (if any)  Address PO BOX 1/20  DILLINGHAM
Name Alice Ruby Organization Changiung Atd. (if any) Address P.D. Box 330  Blg AK 99876	Name Recle Jualin  Organization  (if any)  Address PO 624
Name John O'Connor  Organization  (if any)  Address P.O Box 852  Pla AK 99576	Name SON SEITZ  Organization INDLG  (if any)  Address Box 1270  Dillinshow 99576
Name Mis O'On 100  Organization (if any) Address BOX 852	Name Sob Carpenter  Organization  (if any)  Address Box 701  0/9

### DILLINGHAM AIRPORT MASTER PLAN

AUGUST 22, 2002 PUBLIC MEETING #2

Name <u>Evile</u> Hilstvorm Organization <u>Bristol BayTimas</u> (if any) Address Ro box 1770 Dillingham AK 9576	Name Organization (if any) Address
Name Stadule Tourist  Organization ASCG  (if any)  Address	Name Organization (if any) Address
Name SavaFank' Organization ASC6 (if any) Address	Name Organization (if any) Address
Name Organization (if any) Address	Name Organization (if any) Address
Name Organization_ (if any) Address	Name Organization. (if any) Address

## Meeting focuses on airport alternatives, public weighs in

By Erik Hillstrom

**Bristol BayTimes** 

Discussing much needed renovation and rehabilitation of Dillingham's airport, members of the community pointed out that total relocation seemed an almost reasonable request considering some of the facility's current hurdles.

The deteriorating condition of the runway's pavement, the poor line of sight on the runway, the need for a parallel taxi-strip, insufficient parking, insufficient fencing, inadequate terminal facilities, inadequate water/wastewater facilities and limited access to the Federal Aviation Administration flight service station prompted the opinion that starting over might be best.

However, in an area like Dillingham, smattered with protected refuge and state park areas, as well as Native allotted and other private lands, many wondered—if relocation were an option—where would it go?

Representatives from planning firm ASCG Inc. were in town last Thursday, along with Alaska Department of Transportation officials to keep dialogue and ideas flowing between the pilots and customers that use the local airport facilities the most.

"There were two alternative sites discussed at the last meeting," said ASCG's Sara Funk. "However, both these areas also have wetlands to be dealt with. For total relocation, we would be looking at about \$25 million. We would definitely have to see how the public felt about it, and if we did relo-

cate, we would have to get an environmental impact study done."

Already looking to have their own environmental assessment done, the firm will give advice on alternatives in dealing with increased safety zones. Some of these will encroach on areas of contention, including a small cemetery located next to the runway and some residences. Though expansion of these areas and the length of the runway must be tackled to ensure large cargo-jet service to Dillingham, the answer remains to be heard.

"Well we don't want to lose the jet service," said Dillingham resident Alice Ruby. "And we don't want to disturb residents. I can't imagine anyone, from the city, to the state, or the federal government has the money to purchase the private lands or deal with the cemetery, which would have to be looked at. Maybe if we did something with flat grave markers, or some other redesign, so it wouldn't have to be moved."

"Also, we could turn the direction of the runway slightly to the west, which was suggested," said resident John O' Connor. "That would avoid the cemetery, and allow to include part of the existing runway in the safety zone. But that decreases the distance to the existing buildings, which hopefully wouldn't have to be moved."

A large strip of land, originally purchased for construction of a cross-wind runway lies to the west of the existing runway. Wetlands border the patch of property, and one suggestion was a possible land swap for other surrounding lands. The consensus was that the priori-

ty for a cross-wind runway, on the original airport master plan from the 1980's, had either grown, or decreased depending on who was giving their opinion.

"I think the feeling on the crosswind runway was that there was a high need, and that was sort of ignored," said resident and pilot Rob Carpenter. "You know, a parallel taxiway is a priority for commercial pilots, and a cross-wind runway, preferably gravel, is a priority to general aviation guys like me. It just depends on who you talk to."

All parties were disappointed that no one from the FAA made it to the second planning meeting to answer questions. One project that will be underway next summer is re-pavement of the runway. Butch Douthit with ADOT said his department would focus on runway resurfacing, a project that doubled in price.

"We will be tearing up the existing pavement," Douthit said. "We won't be putting down gravel, we will be trying to focus on the poor runway conditions and getting that repaired, we won't be dealing with the line of sight correction. It took us a while because this was going to cost \$2.5 million, and it grew an additional \$2 million."

The next planning meeting, set for the spring of 2003, will be followed by an environmental hearing in the fall of 2003. For current project information, log on to: www.dillinghamairport.com.

# DILLINGHAM AIRPORT MASTER PLAN

OPEN HOUSE & PUBLIC MEETING

7:00 pm to 9:00 pm Wednesday, March 9, 2005 Dillingham City Council Chambers

Come and learn about alternatives for airport improvements.

For information contact: Jonathan Widdis ASCG Incorporated 907.339.6575

Mark Mayo Alaska DOT&PF 907.269.0519

## DILLINGHAM AIRPORT MASTER PLAN OPEN HOUSE & PUBLIC MEETING

7:00 pm to 9:00 pm Wednesday, March 9, 2005 Dillingham City Council Chambers

At the meeting, airport alternatives considered and selected will be presented. You are invited to attend and provide input into this planning process.

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Dillingham Airport Improvements

Notice of Intent to Begin Environments Studies,
Notice of Wetland Involvement (E.O. 11990), and
Public Meeting

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#### A public meeting will be held on March 9, 2005 from 7-9 pm at the City Hall, Dillingham, Alaska.

ensure that all possible factors are considered in the design of the proposed eject. ADOT&PF is, requesting public comments and recommendations, amounts may be submitted at the public meeting or mailed to the following dress by Friday, March 25, 2005.

Mark Mayo ADOT&PF P.O. Box 196900 Anchorage, AK 99519-6900 Fax: (907) 269-0521 Phone: (907) 269-0519

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UNITED STATES OF AMERICA, STATE OF ALASKA, THIRD DIVISION. BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC THIS DAY PERSONALLY APPEARED **AMANDA J. COHEN** WHO, BEING FIRST DULY SWORN, ACCORDING TO LAW, SAYS THAT SHE IS THE BILLING CLERK FOR:

THE BRISTOL BAY TIMES,

PUBLISHED AT ANCHORAGE IN SAID DIVISION THREE AND STATE OF ALASKA AND THAT THE ADVERTISEMENT, OF WHICH THE ANNEXED IS A TRUE COPY, WAS PUBLISHED IN SAID PUBLICATION ON <u>2/24/2005</u> AND THEREAFTER FOR A TOTAL OF <u>1</u> CONSECUTIVE ISSUE(S), THE LAST PUBLICATION APPEARING ON <u>2/24/2005</u>, AND THAT THE RATE CHARGED THEREON IS NOT IN EXCESS OF THE RATE CHARGED TO PRIVATE INDIVIDUALS.

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Public Notices

Dillingham Airport Improvements Notice of Intent to Begin Environmental Studies Notice of Wetland Involvement (EO:11990) and

#### **Public Meeting**

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To ensure that all possible factors are considered in the design of the proposed project, ADOT&PF is requesting public comments and recommendations, Comments may be submized at the public meeting or mailed to the following address by Friday, March 25, 2005.

> ADOT&PF P.O. Box 196900 Anchorage, AK 99519-6900 Fax: (907) 269-0521 Phone: (907) 269-0519

Mark Mayo

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The Thomas Bay Power Authority (TBPA) request bids from qualified contractors to perform testing and maintenance on high and low voltage circuit breakers. power transformers and circuit switchers. The project work is located at the cities of Wrangell, Petersburg and the Tyee Lake Hydro Electric site.

Only bidders that have recent experience in specific Alaska substation and switchyards work will be considered qualified. A bidder who is not known by the owner operator to have specific Alaska experience shall file with Thomas Bay Power Authority (TBPA) at least 7 days in advance of the scheduled bid opening the bidder's qualification.

The contract documents may be obtained from Thomas Bay Power Authority offices at 4.5 Zimovia Hwy., Wrangell. Alaska 99929. Telephone: (907) 874-3834 Fax: (907) 874-2581. Bid documents will be available on or about Tuesday, February 2, 2005.

Sealed bids will be received at the office of TBPA mile 4.5 Zimovia Hwy. PO BOX 1318, Wrangell , Alaska 99929 until 2PM local time Monday March 7, 2005 at

**Public Notices** 

## PUBLIC

SHAKWAK HIGHWAY **PROJECT** HIGHWAY CONSTRUCTION KM 1707.0 TO KM 1717.4 ALASKA HIGHWAY YUKON 2005-2006

Sealed tenders, completed in accordance with the Specifications of Tender on the forms provided and plainly marked "with the above project title" will be received up to 4:00 p.m. local time, Thursday, March 31, 2005 at Contract Services.

Tender documents may be obtained from Contract Services, (867) 667-5385, Department of Highways and Public Works, Second Floor, 4141-4th Avenue, P.O. Box 2703, Whitehorse, Yukon, Y1A 2C6 on deposit of \$50 cash. Visa, Mastercard, Interac, certified cheque or money order drawn in favour of the Government of Yukon. The deposit is refundable if the tender documents are returned, in good condition, within 60 days of tender closing. Technical questions may be directed to Bill Stanley at (867) 633-7901.

Specifications will also be available for viewing at the office of the Yukon Contractors' Association. Whitehorse, Yukon; The Plans Room in Anchorage, AK: Associated General Contractors, Fairbanks, AK: Copy Express in Juneau, AK; Construction Data Plan Centre, Seattle, WA: DIC Plans Centre, Portland, OR, Alberta Roadbuilders Association; and B.C. Boadhuilders Association

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Appendix C



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THIRD JUDICIAL DIVISION )
BEFORE ME, the undersigned, a Notary Public, this day personally appearedJEFF JONES
who, being first duly sworn, according to law, says that he/she is the <b>PUBLISHER</b> of the
he/she is thePUBLISHER of the Alaska Journal of Commerce published at Anchorage in section and State of Alaska, and that the advertisement, of which the annexed is a true copy, was published in said publication on
Felow 27 th, 2005
and that the rate charged thereon is not in excess of the rate charged private individuals.
Subscribed and sworn before me this 200 s
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Notary Public for State of Alaska NOTARY PUBLIC
My Commission Expire STATE OF ALASK My Comm. Exp. 01/14/09

Dillingham Airport Improvements
Notice of Intent to Begin Environmental Studies
Notice of Wetland Involvement (EQ.11990) and

#### **Public Meeting**

The Alaska Department of Transportation and Public Facilities (ADOT&PF) is soliciting comments and information on a proposal to improve the Dillingham Airport. Proposed improvements include constructing a paved parallel taxiway, runway safety area embankment, additional vehicle parking, and a chemical storage building: and acquiring land for terminal expansion area and w/in the Runway Protection Zones (RPZs), which includes residential and commercial properties.

Pursuant to Executive Order 11990, Protection of Wetlands, notice is hereby given that this project will likely involve fill in wetlands. As presently envisioned, ADOT&PF expects environmental impacts associated with the proposed projects to include fill in wetlands along the west side of the existing runway. A Corps of Engineers Section 404 permit will be required to complete this project.

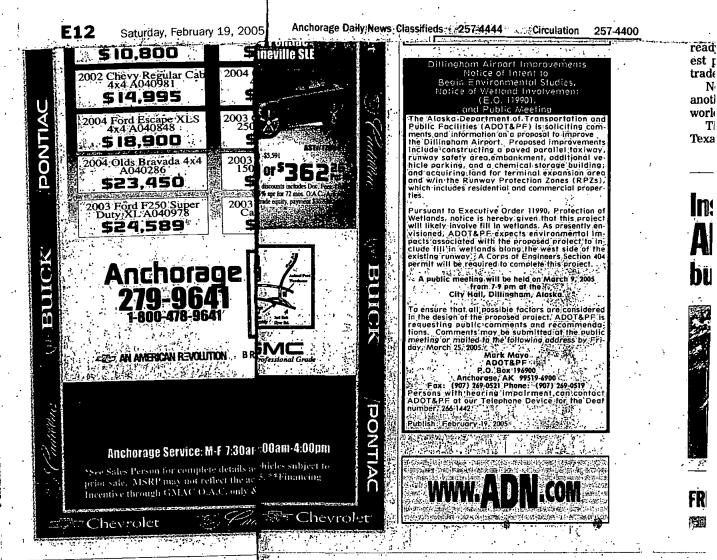
#### A public meeting will be held on March 9, 2005 from 7-9 pm at the City Hall, Dillingham, Alaska.

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Mark Mayo

ADOT&PF P.O. Box 196900 Anchorage, AK 99519-6900 Fax: (907) 269-0521 Phone: (907) 269-0519

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Signed

Subscribed and sworn to me before this date:

Notary Public in and for the State of Alaska.

Third Division. Anchorage, Alaska

MY COMMISSION EXPIRES:

Dillingham Airport Improvement The Notice of Intentation Begint Environmental Studies; Notice of Welfand Involvement (E.O. 18990). The Alaska Department of Transportation and Public Facilities (ADOTS PE) is soliciting comments and information on a proposal to improve the Official March 1997. Proposed improvements include constructing a poved parallel taxiway, runway safety area embankment, additional vehicle parking land o chemical storage building; and acquiring land for terminal expansion area and win, the Runway Protection Zones (RPZs), which includes residential and commercial properties.

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A public meeting will be held on March, 9: 2005 from 1990 at the City Hall, Dillingham, Alaska.

To ensure thatfall gossible factors are considered

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"Mark Mayo."
ADOTAPF
P.O. Bax 196900
Anchorage, AK 99519-6900
Fax: 1907/269-0521 Phone: (907) 269-0519
Revision with hearing impairment concontact ADOTAPF at Jour 196900

ublish: February 19, 2005

# ASCG INCORPORATED

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Please air the following announcement from now through March 9. Thank you very much, Suzanne Taylor Planner, ASCG Incorporated

#### Announcement:

A public meeting will be held on Wednesday, March 9, 2005 at 7 pm in the Dillingham City Council Chambers to present the proposed changes to take place at the Dillingham Airport. At the meeting, airport alternatives considered and selected will be presented. The public is invited to attend and provide input into this planning process.

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#### DILLINGHAM AIRPORT MASTER PLAN

Public Meeting #3 Sign In Sheet				March 9, 2005
Name	Interest in Airport	Address/City/Zip	Phone	e-mail
ALLEN KEMPLEN	PLICESSIUM	4111 KNOTON Le	269-0509	ALLEN_KEMPLENO DOT, STATE. AK.L
Noel Purdy	prefessine	POBOX889 (cityofolg)	842-5211	npural@nishtel-com
JIM MILLER	FAA FLIGHT SVC. ST	A. KENAI AFSS	283-3735	JR. MILLER @ FAG. GOV
Sara Funk	ASCG		and description	
Suzanne Tayl	W ASCG		339 6570	
Cal Johnson	Private	Bx 1589 Dlg. At	845-5532	
NORD HARDER	professional	Box 824 Dig, Alc	842-4440	
John Marx	profession o	P.O. Box 1361 DLG, AK	842-4742	BLG. Commayahan. Com
ANDREW DEVALPEN	2	BOX 844 OCBAIC	4393317	bbersant punchtel-com
William m Jon	nygon	P.O.Box 75D	842-562(	DillughamAK. 9957C
MARK MAYO	DOTAR	l	269-0519	
545an Luette	s ASCG		339-65-20	· Links
Paul Liedberg	Self/FWS	Po. Bx 270, DLG	8-42-1de3	Paliedberge yahracom
MICHAGE HOKE	S USFWS	Box 270 Dic	842-106	
Derick Darrow	igh Bristol Alliance	POBOX 1529 DLG	842-1234	/
GREGG BURTO	AND THE RESIDENCE OF THE PARTY	Box 938	842-258	7 burtoutphashtel, com
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#### DILLINGHAM AIRPORT MASTER PLAN

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#### APPENDIX D

#### **PUBLIC MEETING SUMMARIES**

Public Meeting #1, November 14, 2001	1
Public Meeting #2, August 22, 2002	15
Public Meeting #3, March 9, 2005	

## Appendix D - Public Meeting Summaries Public Meeting #1 November 14, 2001

Dillingham Airport Master Plan

Task 1.4b. Public Meeting. ASCG held a public meeting in Dillingham on November 14, 2001 (agenda attached). The purpose of the meeting was to inform the public about the airport planning effort and solicit concerns and perceptions regarding airport needs. Meeting notices were placed in the Bristol Bay Times (attached). Announcements were read on the Nushagak Electric and Telephone Cooperative radio the week of the meeting. A newsletter (attached) was sent to the project mailing list (attached), consisting of air carriers operating at Dillingham Airport, airport leaseholders, city officials, state and federal agencies, and other local interest groups.

Jonathan Widdis, Sara Funk and Karie Smith of ASCG Incorporated, Mark Mayo, Butch Douthit, and Brad Sworts of DOT&PF were at the meeting and available to answer project related questions. Jonathan Widdis introduced team members.

A sign-up sheet, advisory committee sign up sheet, newsletter, issue surveys and copies of the presentation were made available (attached).

Jonathan Widdis and Sara Funk presented information on the airport master plan and process. The presentation consisted of the following:

- Introductions of Team Members
- Major 1985 Plan Recommendations
- 2001 Master Plan Issues
- Master Plan Schedule
- Advisory Committee Membership
- Contact Information

A discussion lasting over an hour took place. The following are issues and/or comments raised during the discussion:

#### 1. Terminal Building

- John Fulton, City Manager/Planning Director, City of Dillingham, indicated that the travel to Dillingham has increased and so has the need for a larger terminal housing multiple airlines. Jets come in back to back leaving the Alaska Airlines/Pen Air terminal building with more occupants than are allowed by the Fire Marshal. A terminal is also needed due to the increase in airport security. Currently, security screening is only required for the jets, but the rules may change.
- Butch Douthit, DOT& PF, indicated that the City Council has discussed a joint use terminal in the past.
- Dan Layland, City Council Member, indicated that one location for a central terminal would be across from the long-term parking area.
- Dan Layland indicated that the approach to the existing hangars on West Airport Road is not very good. The road is congested and is need of resurfacing. He

Appendix D - Public Meeting Summaries
Public Meeting #1
November 14, 2001
Dillingham Airport Master Plan

would like to see the improvement items identified in the 1985 Airport Master Plan addressed. He would also like terminal parking addressed.

#### 2. Water/Wastewater

- Dan Layland indicated that a central well for the airport is needed. Currently there are individual wells. The water in these wells is not suitable for drinking. The city may be able to talk with state about extending the water and sewer to the airport. There is a subdivision by the Catholic Mission Church, approximately 700' from the long-term parking, which has excellent water. This would be a good place for a central water system.
- John Fulton indicated that the city is currently preparing a Water/Sewer Master Plan. It is now in the "draft" stage. This plan will also address water at the airport and fire issues. A copy of the report will be made available to ASCG.

#### 3. T-Hangars

• A comment was made that if there was land available five pilots are interested in developing a cooperative and managing a T-hangar development. Norman Heyano, Airport Manager/Fire Chief, indicated that the lots might not be big enough. Jonathan Widdis indicated that ASCG would review and address this in the Master Plan.

#### 4. Crosswind Runway

- A crosswind runway doesn't seem to be a big issue. However, Butch Douthit indicated that the development of a crosswind runway was in a 1997 resolution by the City, indicating that it is a priority.
- Norm Heyano indicated that a crosswind runway was still a good idea and necessary but it would not be his number one priority.
- Dan Layland indicated that the airport priorities should be (1) condition of runway; (2) road access for the public; and (3) runway line of sight.

#### 6. Safety Area/Cemetery

- Alice Ruby, Council Member, City of Dillingham, asked if the current airport
  property had enough easement for the safety area. Sara Funk, ASCG, responded
  by saying that there was clearly not enough land at the south end of the runway.
- Sara Funk indicated that the cemetery was a problem for compliance with FAA airport design standards. There are many trees in that area and the land is higher than the runway. The cemetery prevents the airport from meeting the requirements for runway safety area, runway object free area, and primary surface.
- Alice Ruby asked if the trees were cut down would the cemetery then be in compliance. Sara Funk indicated that it would not be in compliance. For the

Appendix D - Public Meeting Summaries
Public Meeting #1
November 14, 2001
Dillingham Airport Master Plan

safety area, a flat area is required 250' from the centerline of the runway. The safety area is designed to prevent major aircraft damage and to facilitate rescue and recovery when an aircraft overshoots, undershoots, or runs off the runway. Moving the runway away from the cemetery is a possibility, but the building restriction line would move and existing buildings might be too close to the runway. Another alternative to removing the cemetery from the safety area would be downgrading the airport's design aircraft, which could put the community in danger of losing its jet service. However, the Alaska District FAA is sensitive to the impracticality of making the runway safety areas comply completely with the standards; an analysis of the practicality is required.

- Butch Douthit asked if moving the cemetery was a possibility, would people be sensitive to this. Alice Ruby indicated that people be very sensitive to this.
- Norm Heyano indicated that the biggest problem with the cemetery was the height
  of the trees. The FAA may change the instrument approach minimums if they
  don't get rid of the trees. It was indicated that the community does not want to
  lose jet service.
- John Fulton indicated that the cemetery is a city cemetery and is the only one that still has room left in it. He realizes the trees need to be cut, however it is hard to get equipment into the area.

#### 7. Relocate Airport

- Three people indicated that they would like to see the airport relocated. A
  potential site 14 miles from City Hall was mentioned, because it is near a gravel
  source. Sara Funk indicated that this option was not addressed in the 1985 Plan.
  ASCG took a drive around the city outskirts and the topography may be a
  problem.
- John Fulton indicated that business owners do not want the airport moved.
- It was indicated that the airport could be moved west of Kanakanak Road, near the VORTAC navigational aid. This location has room for expansion and it is not that much further than the Anchorage Airport is from down town. This location would have a better approach and departure. Land traffic would not be an issue nor would wetlands.
- Mark Mayo, DOT&PF, asked if the State moved the airport would the City be willing to protect it from encroachment through the enactment and enforcement of zoning. The City does not have a zoning ordinance now. Land use conflicts always arise around an airport. People just logically move towards an airport. The cost to relocate the airport would be between \$20 and \$40 million dollars.
- John Fulton indicated that there would not be a problem west of Kanakanak Road.
- Alice Ruby indicated that there are three big landowners west of Kanakanak Road. An easement or purchase agreement would have to be negotiated with them if the property was to be used for a new airport.
- It was indicated that it would be difficult to move the airport 14 miles out. This would make it harder for people that fly in to get groceries, licenses, etc. This area

is also too close to the mountains. Jonathan Widdis indicated that 14 miles is a long drive and people in small communities may not want to drive that far.

• Donald Darden indicated that people need to look at what the airport is serving and the cost of moving it. The current runway is good it just needs to be repaired. We may just be looking at adding more gravel at the north end.

#### 8. Runway

- Donald Darden, Alaska Cargo Service, indicated that the runway is not high in the middle; it is sinking at the north end. When the runway extension was first finished around 1975, a 727 on the north end would be in full view from the south end, and it was impossible to see the runway from a vehicle on Wood River Road. The runway has sunk at least 7'.
- Sara Funk indicated that by displacing the threshold to make more safety areas the runway would be in compliance. However, then you are limiting the type of aircraft that could fly into Dillingham.
- Norm Heyano indicated that FAA is saying there is a national mandate for airports to get into compliance. If the FAA does not accept the parameters of the airport, the airport could lose its funding.
- Brad Hinkes, Pen Air, indicated that they are already losing 14,000 lbs now with the 737 because of the runway length.
- Sara Funk indicated that 1,600' more runway safety area length would be needed for full compliance with the length requirement.
- It was indicated that the runway could be extended over Dillingham/Aleknagik Road. The road could then be built in a tunnel under the runway.

#### 8. Parallel Taxiway

- Donald Darden asked if there was enough room for a parallel taxiway. Sara Funk indicated yes, since you cannot have any buildings within the Building Restriction Line. Butch Douthit indicated that shifting the runway would be the least optimum solution.
- Norm Heyano indicated that his number one priority for the airport would be a parallel taxiway.
- Butch Douthit asked how many planes stack up at one time. Norm Heyano indicated 12. During bad weather it could be more. As many as six small aircraft back taxi down the runway at one time, and then takeoff one after the other, rather than wait for each airplane to taxi and takeoff individually.
- Sara Funk asked if a partial parallel taxiway would be helpful. Norm Heyano indicated it would only help if it served the north end of the runway.
- Norm Heyano indicated that the prevailing wind is different in the summer and winter. During the summer people take off and land to the south, during the winter it is to the north. Back taxing is a big issue no matter what the wind is doing.

- Butch Douthit asked how long of a partial parallel taxiway is needed?
- Donald Darden indicated that a partial parallel taxiway won't help the taxiway should be a full parallel taxiway or nothing.
- Does the partial parallel taxiway need to be paved? Gravel may be better than nothing. Norm Heyano indicated that some aircraft may require pavement.
- Is the back taxing issue part of the runway visibility problem? Sara Funk indicated that you could have different grade on a taxiway. John Marx indicated that you could have a 2 ½ percent slope on taxiways and maximum 1 ½ percent longitudinal slope on the runway.
- A comment was made that it is no use to bring the runway up if it will keep sinking.

#### 9. Airport Master Plan

- What is the time period for the plan? Jonathan Widdis indicated that the plan would be for a 20 year time period. ASCG will be estimating information on population and growth. Many conversations will be held with community residents to obtain this information.
- It was indicated that Dillingham now has the largest population it has ever had.
- Jonathan Widdis indicated that the plan would be prepared without financial constraints. Projects are spread out over a 20-year period. Projects programmed with the first five years will more realistically get funded.
- Mark Mayo indicated that the FAA would participate in the planning process. By the completion of the Airport Master Plan they will have agreed to something. However, there is never any guarantee that the projects will be funded. The plan will address what the needs are to run an airport, i.e. roads, water etc.
- Mark Mayo indicated that the DOT&PF has little or no money to spend on a utility system. FAA does not pay for these services either.
- Jonathan Widdis indicated that the plan would address items such as water and sewer and road access. These items may be a priority and will be brought up in the plan. The city can then use this information to go after other sources of funding.
- Sara Funk indicated that the plan would be prioritized by 5 years, 10 years and 20-year projects. Safety projects are usually done first. Deficiency projects are also indicated with the first 5 years.
- Sara Funk indicated that next spring the airport will be flown and this new information will be used in the plan.
- Jonathan Widdis indicated that the Anchorage Airport has landing fees and they are also experiencing the 300' set back.

Appendix D - Public Meeting Summaries
Public Meeting #1
November 14, 2001
Dillingham Airport Master Plan

#### 10. Misc. Items

- Brad Sworts, DOT&PF asked if it was possible to make the crosswind runway the main runway. Sara Funk responded by saying it would depend on the air carrier. Jets could not land on it.
- Norm Heyano indicated that this would not be a good idea; the current runway has been orientated for the winds.
- Ralph Sorenson indicated that when the airport was first built it was way out of town. If the airport were relocated in 10 to 20 years you would still have the same problem. Bethel had the foresight to move the airport away from town. He would suggest relocating it only if there was money available.
- Parallel taxiway is also a safety issues.

End of Meeting

### **AGENDA**

## Dillingham Airport Master Plan November 14, 2001

### Introduction

Master Plan Purpose & Process

Schedule

Recommendations from 1985 Master Plan

Master Plan Issues, 2001

Advisory Committee Membership

**Questions/Discussion** 

## **Master Plan Schedule**

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+	<b>Issue Identification</b>	Fall 2001	
	Forecast Approval	Spring 2002	
+	Alternatives Development	Summer/Fall 2002	
	Draft Master Plan and ALP	Winter 2002/2003	
+	Environmental Assessment Scoping Meeting & Preferred Alternative	Winter 2003	
+	Environmental Public Meeting/Hearing	Fall 2003	
	Final Master Plan	Winter 2003	

## **Major 1985 Plan Recommendations**

- → Runway Resurfacing paving completed 1990; rehabilitation planned for 2003
- > Parallel Taxiway not completed
- > Crosswind Runway not completed
- → GA Tiedown Apron completed
- → Heavy Aircraft Apron Expansion completed

### **2001 Master Plan Issues**

- → Runway & Safety Area
- → Need for a Parallel Taxiway
- → Runway Line-of-Sight
- → Fencing
- → Vehicle Parking
- → Aircraft Parking

## **2001 Master Plan Issues**

- → Crosswind Runway
- → Wetlands Protection
- → Flight Service Station Access
- → Others?

## Advisory Committee Membership Should Represent:

- → Air Carriers & Air Taxis
- → General Aviation (Different Types)
- → Other Tenants & Airport Users
- → Airport Neighbors
- → Others?

- → Local Government (Elected & Non-elected)
- → Civic Organizations
- → Local Industry
- → Hospital & School System

### **For More Information:**

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#### Appendix D - Public Meeting Summaries

Public Meeting #2
August 22, 2002
Dillingham Airport Master Plan

ASCG held a public meeting in Dillingham on August 22, 2002 (agenda attached). The purpose of the meeting was to present the forecast, demand/eapacity and requirements analysis, and to solicit ideas from the public on alternatives. This information will be used in the development of Technical Memorandum Number Two. A notice was placed in the Bristol Bay Times (attached) and announcements were read on the Nushagak Electric and Telephone Cooperative Cable TV station and on KDLG radio. In addition, flyers (attached) were sent to everyone on the project mailing list consisting of air carriers operating at Dillingham Airport, airport leaseholders, city officials, state and federal agencies, the airport advisory committee and other local interest groups. Flyers were also posted at key locations throughout Dillingham.

Jonathan Widdis, Sara Funk and Suzanne Taylor of ASCG Incorporated, and Mark Mayo and Butch Douthit of DOT&PF were at the meeting and available to answer project related questions. Jonathan Widdis introduced those participating.

A sign-up sheet and copies of the presentation were made available (attached).

Jonathan Widdis and Sara Funk presented information on the airport master plan including the following:

- Introduction of team members
- Project Status
- Issues
- Forecasts
- Requirements
- Alternatives Development

The discussion, which lasted over an hour following the presentation, included the following issues and/or comments:

#### Forecasts

• John Bennett, Jr. asked whether the forecasts indicated physical expansion of the airport in the future.

#### Appendix D - Public Meeting Summaries

Public Meeting #2
August 22, 2002
Dillingham Airport Master Plan

Sara Funk indicated that that has not yet been determined, but will be a part of the next phase of the planning process.

#### Airside Requirements

- Rob Carpenter asked if there has been any data gathered or study done regarding the number of times commercial planes are turned back unable to land due to weather.
  - Sara Funk replied that there is no data on planes turned back; however according to the National Oceanic and Atmospheric Administration (NOAA) weather conditions in Dillingham are below VFR ten percent of the time and below Dillingham Airport's current minimum standards two percent of the time.
- There was some question as to the accuracy of the two percent no success rate on flights. Two or three people seemed to think that this number was too low and that flights are turned back more than two percent of the time.
- John Bennett, Jr. commented that in December ice fog often severely impairs visibility.
- Rob Carpenter asked if there is a point at which a precision instrument runway is mandated.
  - Sara Funk said that the number of instances of planes turned back, the level of use and the cost are all factors in determining the type of runway required. GPS is another, less costly, alternative.
- Alice Ruby pointed out that the data is only on flights that are turned back; but some never even take off when weather is poor.
- Rob Carpenter asked if there was an FAA representative present (no) and stated that it is hard to plan without the FAA to give input and to answer questions.
  - Mark Mayo said that the FAA representative was invited but was unable to attend. He added that the FAA will review this report and any additional written public input. They have to approve any recommendations.
- Alice Ruby asked if it is possible to do something other than move the cemetery to meet FAA obstructions regulations.
  - Sara Funk replied that the FAA would have to do an air space review.
- Nick Bagierek said that the cemetery served as a safety reminder.
- John O'Connor pointed out that the cemetery would definitely be a problem because it is higher than the runway even if the trees at the cemetery were removed.
- Alice Ruby asked if the runway could be moved.

Public Meeting #2 August 22, 2002

Dillingham Airport Master Plan

John O'Connor pointed out that if the runway were moved buildings would have to be moved.

#### Landside Requirements

- Butch Douthit asked for clarification on the square footage required in terminal buildings. Are air carriers and air taxis included?
  - Jonathan Widdis said that yes, the assumption is that air carriers and air taxis would be included in a terminal building if one were planned.
- Rob Carpenter said that a new site would need to be designated if T-hangars were to be planned for.
- Katy Bagierek asked if the state owns enough land for T-hangar expansion. Jonathan Widdis said that yes, the state owns enough land but it is currently undeveloped.

#### Alternatives Development

- John O'Connor asked how far the runway could be moved toward the buildings without the buildings having to be moved.
  - Sara Funk indicated that would be about 150 feet.
- Katy Bagierek pointed out that angling the runway would be constrained by wetlands.
- John O'Connor said that the hill at the north could be a problem.
- Rob Carpenter asked if relocating the airport near the hospital was still an option. Sara Funk indicated that costs and wetlands could be prohibitive but that the community's preferences would be taken into account.
- Alice Ruby said that the Togiak National Wildlife Refuge is in that area.
- Sara Funk stated that an Environmental Impact Statement (EIS) would be necessary for a major project such as relocating the airport.
- Rob Carpenter said that pilots suggested the move to the site near the hospital and ruled out the suggested site 13 miles out toward Aleknagik because of the hills in
- John Bennett, Jr. said that the end of the runway would sink again if it is corrected.
- Rob Carpenter indicated that the runway has sunk 30 feet from one end to the other, 18 feet from the center.

#### Appendix D - Public Meeting Summaries

Public Meeting #2 August 22, 2002

Dillingham Airport Master Plan

• Cecilie Martin asked why the airport bought the large area to the west.

Butch Douthit said this area was intended for a crosswind runway.

- John Bennett, Jr. said that he lives at the north end of the runway and gets a lot of traffic over his house. The plane that crashed last year took off over his house. When there is a crosswind, more traffic goes over his house.
- William Tennyson asked if there was any study of noise pollution at the airport.

  Sara Funk said that although noise is a common complaint in airport planning, we

haven't heard it too much in Dillingham.

- John Bennett, Jr. reiterated that it is very loud over his house and that he can't talk on the phone when planes fly over, particularly air taxis.
- Jody Seitz said that freight planes at the end of Squaw Creek are really noisy on take-off.
- John O'Connor joked that his neighbor's radio is louder.
- Katy Bagierek asked why the state will not fund a new terminal and cargo space when they receive lease money. She stated that the terminal creates a very poor impression of the Dillingham area.
  - Sara Funk said that airports in general do not make money for the state and that terminals especially lose money as a rule. Grants can help with funding. The city of Homer runs their terminal.
- Nick Bagierek asked if new security requirements due to 9/11 will necessitate a new terminal facility anyway.
  - Sara Funk indicated that luggage screening equipment for explosives detection is large and costly. It could be a size issue for the current facilities.
- Sara Funk said that transient aircraft airport users have no terminal space now corporate jets, etc.
- John Bennett, Jr. asked if relocating the airport is unlikely because of lack of funding.
  - Sara Funk said that was true.
- Mark Mayo also indicated that there were political issues due to the way such a move would drain funding from other possible projects and that this would also make relocation unlikely.
- Katy Bagierek asked if the plan would include reutilization or consolidation of existing buildings.
  - Sara Funk said that many buildings currently have multiple users.
- Katy Bagierek asked if the plan was to pave the GA apron.
  - Sara Funk said this is what is recommended.

#### Appendix D - Public Meeting Summaries

Public Meeting #2 August 22, 2002

Dillingham Airport Master Plan

• John O'Connor pointed out that a crosswind runway would change the utilization of space. He inquired about the safety areas for the crosswind runway.

Sara Funk said that the crosswind runway would be for small planes; so the safety area would be smaller.

- Butch Douthit is working on rehabilitation of runway. The project is scheduled for summer, 2003. He reported that the budgeted \$2.5 million has increased to \$4.5 million because the FAA requires safety improvements along with any rehabilitation.
- John Bennett, Jr. stated that he thought it would be best, if there were money, to move the airport so as not to have to move the residents or the cemetery.
- Alice Ruby pointed out that all the alternatives seem to require construction. She wondered if it could be done in a logical order.

Sara Funk agreed that there are phasing issues, but that the airport would not be shut down.

- Jonathan Widdis explained that the 20-year goal must first be established; then the
  component steps could be prioritized and put in logical order so as to achieve the
  ultimate goal.
- Alice Ruby expressed concern about parking needs and talked about the unique needs of rural passengers as opposed to those in the city. I.e. having boxes and groceries rather than rolling luggage. This makes the 300-foot security area rule difficult for the rural passenger.

Sara Funk said that the 300-foot rule is negotiated on a case by case basis, and pointed out that the parking garage in Anchorage is within 300 feet of the terminal building.

Butch Douthit said that the rules are still in flux and that the 300-foot rule only applies to certified air carriers (Alaska Airlines in Dillingham).

Sara Funk said that all of the 60 spaces are within 300 feet of the terminal areas.

- Sara Funk said that a community effort would be required to get a consolidated terminal. The state would cooperate with the community, but not initiate such a project.
- Cecilie Martin asked how Homer solved the problem of existing lots and buildings when they built their consolidated terminal.
- Sara Funk explained that within safety areas, DOT paid for demolition of buildings; but not all airport businesses in Homer are willing to pay the lease rate for space within the terminal building.

Anchorage and Fairbanks Airports have state-owned terminals. Kenai and Homer are examples of city-owned terminals. A legislative grant may help to fund a terminal if that is a community priority.

The lease lots belong to the state and individuals own the buildings on the lots.

Public Meeting #2 August 22, 2002 Dillingham Airport Master Plan

- Rob Carpenter asked about the runway protection zones. Is there a deadline for compliance? He stressed that shortening the runway should not be considered and that it is important to keep the runway safe for jets as they are critical to certain companies.
- Sara Funk explained that there are timelines associated with FAA certification. A practicability study could show options to full compliance.
- Butch Douthit explained that the FAA would not waive the safety area but would accept a phased compliance.

Next summer's project is for runway rehabilitation only, not apron, taxiway or like-of-sight improvements.

If something is designated as a congressional priority, it is not funded with additional money. It merely becomes higher on the priority list.

- Alice Ruby said, "We want everything. We want jets. We don't want to disturb residents. It's difficult to do it all." She went on to ask if it would help if the cemetery had flat markers, the trees were eliminated and no new graves were put there.
- John O'Connor said that moving the runway west would also help.
- Mark Mayo explained the process of funding and the time line of a project. Once a plan is completed, the priority project is nominated; the Alaska Project Evaluation Board (APEB) scores the project, with the higher scoring projects receiving funding sooner. It usually takes three to five years for funding to be allocated, then another two years to design the project. It could take five to seven years for Dillingham to see a project as a result of this master plan.
- Rob Carpenter asked how the crosswind runway ranked in 1985.
   Mark Mayo explained that the APEB process was not in place then.
- Rob Carpenter said that a parallel taxiway and a crosswind runway should be priorities.

Mark Mayo said that a crosswind runway would probably not receive a high APEB score because too many villages still need basic runways. Further, the serious deficiency in the safety area of the main runway will be a higher priority for both the FAA and DOT.

Butch Douthit added that the 94 percent coverage that the current runway has will reduce the likelihood of funding for a crosswind runway as well.

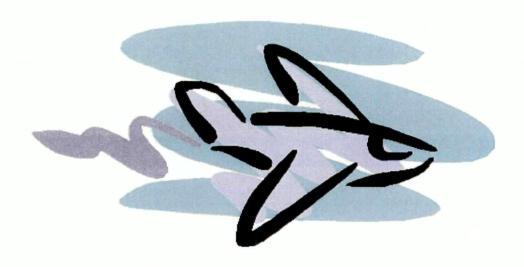
- Alice Ruby said that now that there are fewer cargo planes (than when fish was being flown out regularly), the need for a crosswind runway is reduced.
- Rob Carpenter said, "But it could turn around in 20 years!"
- John O'Connor pointed out that smaller private strips also reduce demand.

#### Appendix D - Public Meeting Summaries

Public Meeting #2 August 22, 2002 Dillingham Airport Master Plan

- Jody Seitz asked how community priorities could be assessed since only a few pilots were present.
- John O'Connor said that a parallel taxiway is critical to safety.
- Cecilie Martin said that some small planes have landed on the east-west taxiways when crosswinds were critical.
- Rob Carpenter said that General Aviation pilots want a gravel crosswind runway, but air taxi pilots and others want a parallel taxiway.
- Cecilie Martin pointed out that air taxis would also want to use the crosswind runway.
- Sara Funk asked how long a crosswind runway would need to be.
- John O'Connor said that 2,100 feet would be enough, but that the dimensional needs of air taxis would have to be satisfied.
- Chris O'Connor reported that more and more tourists are in the library and museum. Adventure travel is popular.
  - Sara Funk said that increases to tourism have been included in the forecasting.
- John O'Connor said that it is important to solve safety and economy issues from the Planning Commission's viewpoint. We want to keep the full runway length and also solve the safety problems.

# DILLINGHAM AIRPORT MASTER PLAN



PRESENTATION & PUBLIC MEETING

THURSDAY, AUGUST 22, 2002

6:00 - 8:00 p.m.

# **AGENDA**

- INTRODUCTION
- PROJECT STATUS
- ISSUES
- **FORECASTS**
- REQUIREMENTS
- ALTERNATIVES DEVELOPMENT

# MASTER PLAN SCHEDULE

ISSUES IDENTIFICATION

**FALL 2001** 

FORECAST APPROVAL

**SUMMER 2002** 

ALTERNATIVES DEVELOPMENT

SUMMER/FALL

2002

DRAFT MASTER PLAN AND ALP

WINTER 2002/2003

ENVIRONMENTAL ASSESSMENT SCOPING MEETING AND PREFERRED ALTERNATIVE

SPRING 2003

ENVIRONMENTAL PUBLIC FALL 2003 MEETING/HEARING

FINAL MASTER PLAN

**WINTER 2003** 

#### MASTER PLAN ISSUES

- RUNWAY CONDITION & SAFETY AREA
  DEFICIENCY
- Poor Runway Line-of-Sight
- TAXIING ON RUNWAY
- INSUFFICIENT FENCING
- INSUFFICIENT VEHICLE PARKING
- LIMITED AIRCRAFT PARKING & ENCLOSED PARKING FACILITIES
- CROSSWIND COVERAGE
- WETLANDS
- FLIGHT SERVICE STATION ACCESS
- OBSTRUCTIONS TO AIR NAVIGATION
- ENCROACHMENT
- INADEQUATE TERMINAL BUILDING
- INADEQUATE WATER/WASTEWATER SYSTEMS
- ACCOMODATION OF AIRPORT & COMMUNITY

  GROWTH



- PASSENGERS
- CARGO
- BASED AIRCRAFT
- AIR TAXI & GENERAL AVIATION OPERATIONS
- TOTAL AIRCRAFT OPERATIONS
- PEAK DEMAND

# DRAFT AIRSIDE REQUIREMENTS SUMMARY

Deficient Feature	Existing	Required by 2023	
Airfield Pavements	Runway condition poor and surface slick Taxiways and apron conditions poor	Rehabilitation	
Runway Line-of-Sight (Longitudinal Gradient)	8' hump in middle	Must see from end to end at 5' above surface, unless full parallel taxiway	
Runway Safety Area	200' x 6,893'	500' x 8,404'	
Runway Object Free Area	300' x 7,601'	800' x 8,404'	
Runway Obstacle Free Zone	300' x 6,804'	400' x 6,804'	
Parallel Taxiway	None	Full	
Instrument Approaches	Nonprecision Approach	Precision Approach	
Runway Protection Zones	Buildings within 500' x 1,010' x 1,700' RPZ	No buildings within 1,000' x 1,750' x 2,500' RPZ (precision approach)	
Crosswind Runway	None	Gravel, 3,300' x 60'	
GA Apron	52,500 sq. yd. gravel	59,300 sq. yd. paved	
Main Apron	87,733 sq. yd.	10,500 sq. yd. more (if precision approach)	
Helicopter Facilities	Helicopters park on gravel GA Apron	Designated paved heliport	
Obstructions	Cemetery, fence, road, trees, terrain	Removal or resolution	
Navaids	Deficient for precision approach	Approach lights, runway visual range, glideslope	

# DRAFT LANDSIDE REQUIREMENTS SUMMARY

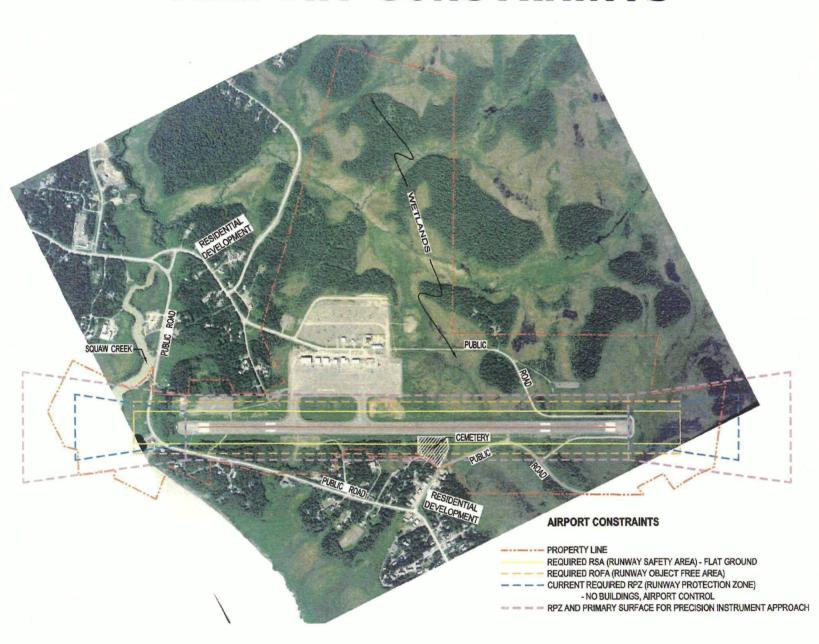
Deficient Feature	Existing	Required by 2023	
Passenger Terminal Space*	Individual Buildings	16,000 square feet if consolidated	
Cargo Terminal Space*	Individual Buildings	9,600 square feet	
Lease Lots	7 (10.60 acres of land) 5 vacant (3.38 acres)	No additions	
T-Hangars*	None, and no appropriate lots available	Designate site for T-hangars (1-5 acres of land)	
East Dillingham Road in Runway Safety Area		Relocate road or RSA	
Wood River Road in Runway Safety Area		Relocate road or RSA	
Dillingham East Road	Access to resident through airport property	Close road, provide alternative access	
Fencing	Poor condition or lack of	Install and/or reinstall fencing around perimeter of airport and GA area	
Passenger Automobile Parking	60 spaces east of West Airport Road, most within 300' of Alaska Terminal; 40-50 spaces (0.5 acres) west of West Airport Road	185 spaces needed (1.70 acres) outside 300' prohibition	
Airport Utilities*	Individual wells and septic systems	Extend City's water/sewer lines or create separate water/sewer system for airport	
FSS*	Needs replacement/ improvement	Replace/improve	
Air Traffic Control Tower*	None	Designate site	
Fixed Base Operator*	No full service FBO, no aircraft maintenance, no GA terminal	Reserve space for full service FBO	

<sup>\*</sup> Would not be funded by DOT&PF

# POSSIBLE ALTERNATIVES

Requirement	Possible Alternatives
Runway Safety Area, Object Free Area, and Primary Surface Compliance	<ul> <li>Declared distances for length, approved modification of standard for width, no approach improvement, relocate 100' of cemetery</li> <li>Expand around existing runway, relocate public roads, relocate cemetery</li> <li>Move runway 700' north and 350' west, relocate airport buildings</li> <li>Rotate runway to northwest to lessen relocations</li> <li>Relocate airport</li> </ul>
Crosswind Runway	<ul> <li>On southwest side of 1-19</li> <li>On northwest side of 1-19</li> <li>No crosswind runway</li> </ul>
Heliport	South end of GA Apron     Main Apron
Passenger, Cargo, GA Terminals/FSS/FBO	<ul> <li>Consolidated Passenger/Cargo/GA Terminals with FSS</li> <li>Consolidated Passenger/Cargo Terminal and Consolidated FBO/GA Terminal/FSS</li> <li>Development of individual facilities on individual lease lots</li> <li>Alternative locations: north or south end of Main Apron, redevelopment of leased area, GA Apron</li> </ul>
T-Hangars	West or south end of GA Apron

# DILLINGHAM AIRPORT MASTER PLAN AIRPORT CONSTRAINTS



Appendix D - Public Meeting Summaries
Public Meeting #3
March 9, 2005
Dillingham Airport Master Plan

ASCG held a public meeting in Dillingham on March 9, 2005 (agenda attached). The purpose of the meeting was to present the alternatives considered for the airport and the draft preferred alternative and short-term projects to be evaluated in the Environmental Assessment. Notices were placed in the Bristol Bay Times, Anchorage Daily News, and Alaska Journal of Commerce (attached), and announcements were read on the Nushagak Electric and Telephone Cooperative Cable TV station and on KDLG radio. In addition, postcards (attached) were sent to everyone on the project mailing list consisting of air carriers operating at Dillingham Airport, airport leaseholders, city officials, state and federal agencies, the airport advisory committee and other local interest groups. Flyers were also posted at key locations throughout Dillingham by the City and the Airport Manager.

Sara Funk, Susan Luetters, and Suzanne Taylor of ASCG Incorporated, and Mark Mayo, Allen Kemplen, and Terry Victor of DOT&PF were at the meeting and available to answer project related questions. A sign-up sheet and copies of the presentation were available (attached).

Mark Mayo introduced those participating. Suzanne Taylor reviewed the project schedule and planning activities to date.

Sara Funk presented information on the airport master plan including the following:

- Facility Requirements
- Alternatives Considered
- Preferred Alternative
- Short-term Projects

The discussion, which lasted until 9 p.m., included the following questions, issues, and/or comments:

Michael Hukes asked what would happen to the old runway when the new one is constructed. Could it be left as a gravel runway for aircraft with tundra tires?

Sara said that they would have to be 700 feet apart to have simultaneous visual operations. FAA may not allow a gravel runway immediately adjacent to the primary runway at Dillingham because it has Part 139 certification, which is needed for airports that have commercial airline service with planes of 30 seats or more.

William Tennyson asked what will happen to the existing buildings when the runway moves.

Sara said that there is room to move the runway without losing much more apron area than would not be useable when the ILS is installed. The buildings and parked aircraft will still be outside the transitional imaginary surfaces.

Paul Liedberg asked about the process of acquiring land.

Terry Victor said that the land would be appraised by an independent appraiser as mandated by State and Federal regulations. The ADOT&PF would make an offer and

Appendix D - Public Meeting Summaries
Public Meeting #3
March 9, 2005
Dillingham Airport Master Plan

negotiate a sale whenever possible. Eminent domain would only be used as a last resort. Relocation of the displaced would be accomplished under a separate program.

William Tennyson asked if the whole process of acquisition of safety areas would have to recur in 20 years due to changes to regulations.

Sara couldn't rule that out. She indicated that changes are generally due to specific safety requirements and are usually changes in response to accidents.

Jim Miller asked about the length of the proposed crosswind runway.

Sara said that the ultimate proposed length would be 3,300 feet. However, if it is constructed, it is likely to be phased, beginning with about 2,000 feet, which would stop short of a creek that would present additional impediments. There isn't a demonstrated need for a longer crosswind runway and the project would not likely be a priority because the existing runway provides 94% wind coverage.

Paul Liedberg asked how much gravel area would be adjacent to the paved runway.

Jim Miller suggested that a gravel touchdown area at the end of the runway could facilitate use by tundra-tired aircraft.

Mark Mayo said that would be an FAA nonstandard condition and could possibly be negotiated.

Mike Hukes said that many pilots avoid Dillingham Airport because there are no facilities for aircraft with tundra tires.

Gregg Burton said that acquisition of residential property by the State could reduce the City's tax base.

Sara acknowledged this as an issue.

Sara explained the possibility of a reduced RPZ at the north end of the runway if the FAA places the instrument landing system (ILS) at the opposite end. If this occurs, less property would have to be acquired. Sara also explained GPS approaches as differentiated from ILS approaches.

Mark Mayo said that most complaints of noise impacts are from homes at the north end of the runway. This would continue to be an issue if the property is not acquired.

Question: which end of the runway has greater use under instrument meteorological conditions (IMC)? (South)

Question: what is considered "short-term"? (5 years)

Question: how many people will be displaced by acquisition? Terry Victor responded: a minimum of 25 families.

Question: what are the consequences of non-compliance with FAA RSA and RPZ standards? Before the recent runway improvements, the FAA made RSA improvements a requirement for funding. The FAA will not fund any more projects unless they facilitate RSA compliance or substantial improvements.

Appendix D - Public Meeting Summaries
Public Meeting #3
March 9, 2005
Dillingham Airport Master Plan

Mark Mayo explained the National Environmental Policy Act (NEPA) process that projects must undergo.

Cal Johnson asked how long before acquisition would occur. (close to 5 years most likely)

Question: would the RPZ affect Waskey Road? (no)

Question: who signs off on the plan? (The FAA signs off on the EA and must approve projects for funding. Alaska receives \$75 to 100 million in airport improvement funds each year. This is allocated competitively between all Alaskan airport projects.)

Question: where were the relocation alternatives considered? Past the hospital and out Aleknagik Road. Relocation was too expensive to be considered feasible.

Cal Johnson and John Marx stated that although they live to the side of the airport, the noise is still excessive – not only on the ends.

The meeting closed at 9 p.m. Participants were encouraged to submit written comments.

# DILLINGHAM AIRPORT MASTER PLAN

PUBLIC MEETING



WELCOME

MARCH 9, 2005

#### AGENDA

- **□** Introduction
- **☐** Project Status
- **□** Facility Requirements
- **☐** Alternatives Considered
- **☐** Preferred Alternative
- ☐ Short-Term Projects

# Appendix D - Public Meeting Summaries

# MASTER PLAN SCHEDULE

☐ Issues Identification	Fall 2001	Public Meeting November 2001
☐ Forecast Approval	Summer 2002	
☐ Alternatives Development	Summer/ Fall 2002	Public Meeting August 2002
☐ Preferred Alternative Approval	February 2005	
☐ Environmental Assessment Scoping	Winter 2005	Agency & Public Meeting March 2005
□Final Master Plan, ALP, & EA	Early 2006	

# FACILITY REQUIREMENTS

- \* Airfield
- **★** Terminal Facilities
- **★** Lease Lots
- **★ Support Buildings**
- **★** General Aviation Improvements
- **★** Utilities

# Appendix D - Public Meeting Summaries

# AIRPORT CONSTRAINTS



ROPERTY BOUNDARY

REQUIRED RSA (RUNWAY SAFETY AREA) — FLAT GROUND
REQUIRED ROFA (RUNWAY OBJECT FREE AREA)

CURRENT REQUIRED RPZ (RUNWAY PROTECTION ZONE)

NO BUILDINGS, AIRPORT CONTROL

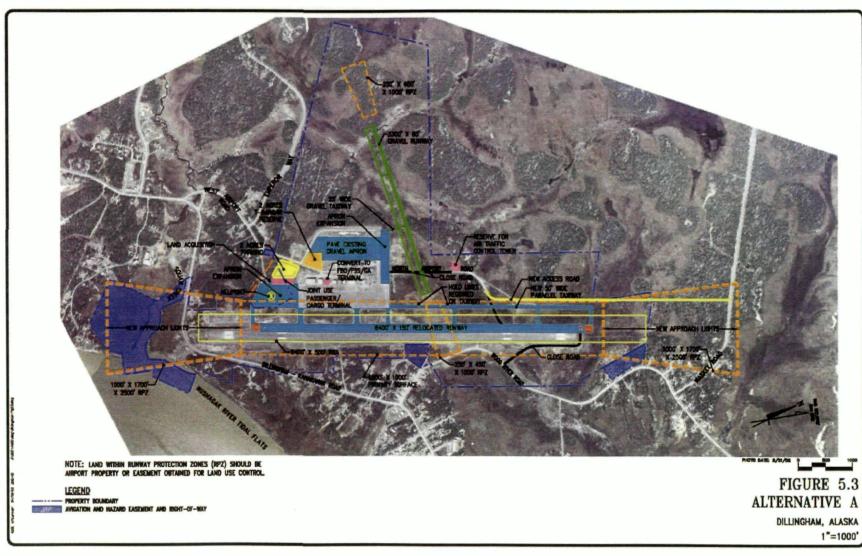
RPZ AND PRIMARY SURFACE FOR PRECISION INSTRUMENT APPROACH
AVIGATION AND HAZARD EASEMENT AND RIGHT-OF-WAY

NO POTABLE WATER

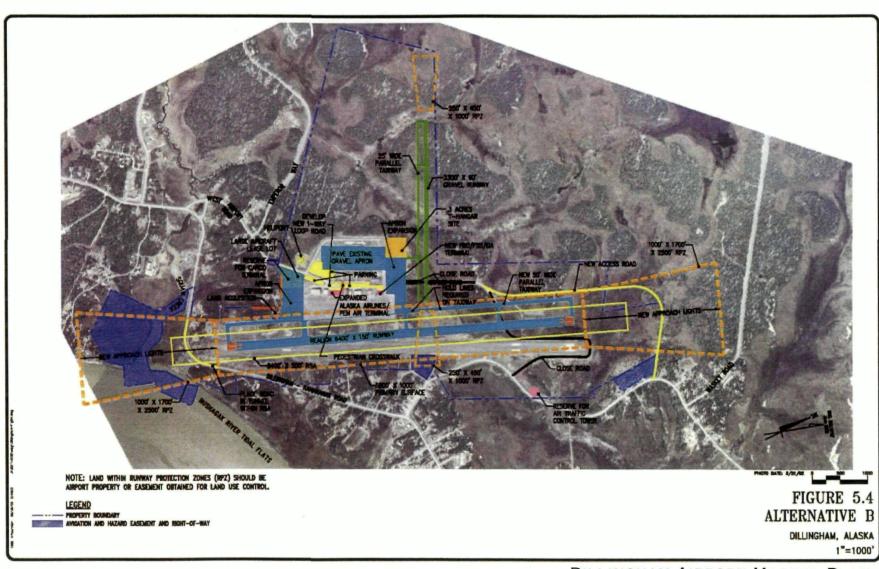
FIGURE 5.1 AIRPORT CONSTRAINTS

> DILLINGHAM, ALASKA 1"=1000'

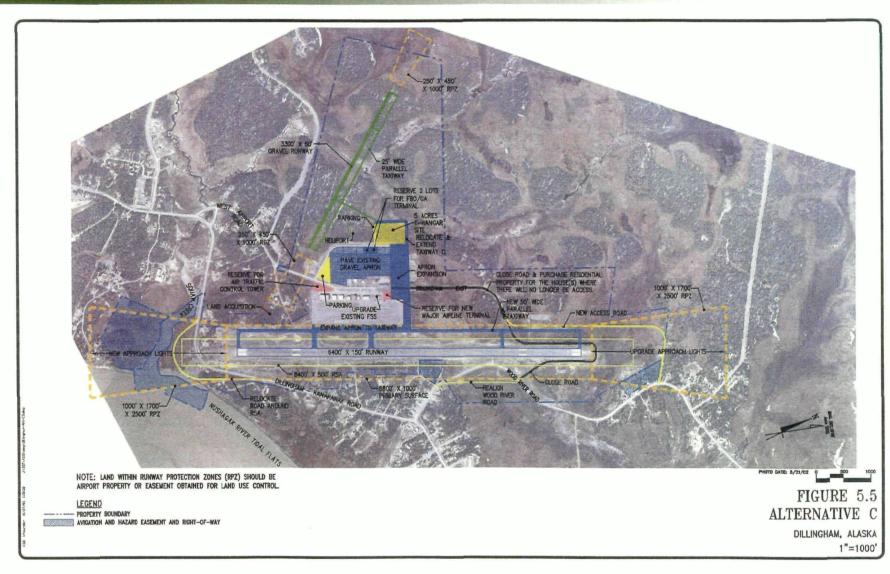
### ALTERNATIVE A



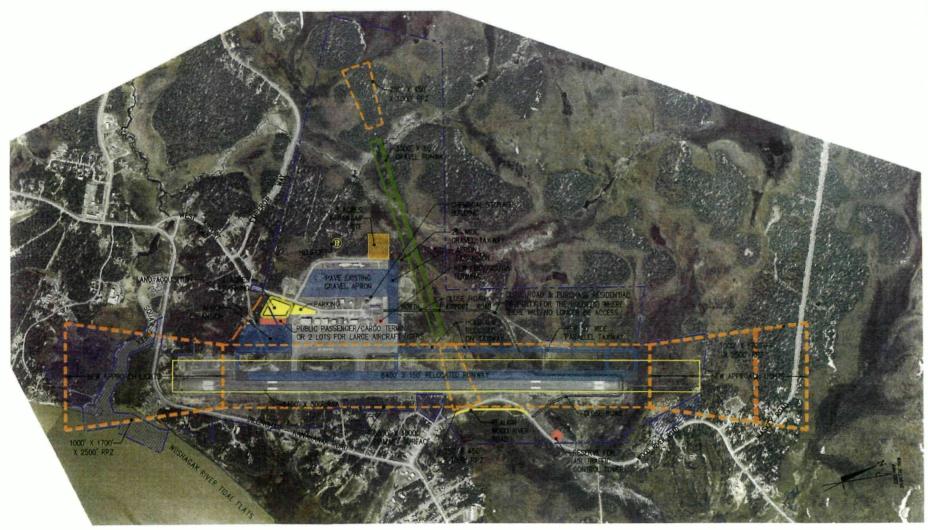
### ALTERNATIVE B



# ALTERNATIVE C



# PREFERRED ALTERNATIVE



# REASONS FOR SELECTION

- ☐ Lowest cost
- ☐ Provides full RSA compliance without affecting Dillingham/Kanakanak Road or the cemetery
- ☐ Retains more useable apron than Alternative B
- □ Crosswind runway location is #1 or #2 for land acquisition, wind coverage, visibility between runways, and 2,000-foot-long first phase runway without creek crossing
- □ Locations of crosswind runway and ATC tower are functional and do not use developable land southwest of the terminal area, which may be reserved for long-term future landside development
- □ Reserves room for consolidated passenger terminal with expansion capability and good access

# Appendix D - Public Meeting Summaries

## SHORT-TERM PROJECTS

- ☐ Parallel taxiway with intermediate runway access taxiways
- □ Acquire land south of terminal area for future taxiway, apron, and landside development
- □ Acquire land within existing and future Runway Protection Zones (RPZs)
- ☐ Construct chemical storage building
- ☐ Expand vehicle parking at south end of terminal area
- ☐ Build Runway Safety Area (RSA) embankment

# SHORT-TERM PROJECTS

# Appendix D - Public Meeting Summaries

### PROJECT CONTACTS

Mark Mayo, ADOT&PF Project Manager

Phone: (907) 269-0519

FAX: (907) 269-0521

Jonathan Widdis, ASCG Incorporated

Phone: (907) 339-6575

(800) 478-4153

FAX: (907) 339-5327

jwiddis@ascg.com

Project Website: www.dillinghamairport.com

### COMMENTS

Your ideas or concerns about the Airport are important to us. Please use the space below to share them with us. You may return the form to us or mail it to ASCG, 3900 C Street, Suite 501, Anchorage, AK 99503. Fax: 907.339.5328.

#### **APPENDIX E**

#### **INTERVIEW & MEETING SUMMARY**

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FAA Flight Service Station Mary Elen Cunningham November 15, 2001 Dillingham Airport Master Plan

Mary Elen Cunningham was interviewed by Sara Funk, Jonathan Widdis, and Karie Smith of ASCG Incorporated. She can be reached at:

1539 Toyon Way, Kenai, AK 99611-7926 842-5275 (DLG FSS) 283-0206 (Home) 283-3735 (ENA AFSS) Maryelen@ptialaska.net

At the end of the interview, Bill Toppa, who also works there, came in. He can be reached at P.O. Box 1090, Dillingham, phone 283-6124.

#### 1. Information on Flight Service Station

- The Flight Service Station (FSS) is staffed by FAA personnel who rotate from Kenai and work one week on and one week off. Off-airport housing is provided for the staff.
- The FSS is responsible for reporting on conditions at the following 12 airports, for which Dillingham is the hub:

Togiak Airport (TOG), Togiak Village
Twin Hills Airport (A63), Twin Hills
Manokotak Airport (17Z), Manokotak
Aleknagik / New / Airport (5A8), Aleknagik
Ekwok Airport (KEL), Ekwok
New Stuyahok Airport (KNW), New Stuyahok
Koliganek Airport (JZZ), Koliganek
Potage Creek Airport (A14), Potage Creek
Clarks Point Airport (CLP), Clarks Point
The Queens Airport (5QN), Queens
Ekuk Airport (KKU), Ekuk
Shannons Pond Seaplane Base (0Z3), Dillingham

- In the mid-1970s, the FSS was moved from the east side to its present location. The current FSS has been leased for another two years. Cost is \$8,000 per month.
- The FSS is responsible for weather reporting.

#### 2. Air Traffic Direction

- Pilots always use Runway 1 when they can because of the taxiway locations.
- In the mornings, most air taxis travel upriver to bring people in to catch Pen Air flights. If IFR conditions are upriver, the cargo carriers will go wherever they can get in.

#### 3. Peak Conditions

FAA Flight Service Station Mary Elen Cunningham November 15, 2001 Dillingham Airport Master Plan

- August is the busiest month due to fishing. Radio contacts, including advisories, are a measure of number of landings and takeoffs. FSS personnel talk to each arriving and departing airplane three times, sometimes more. On some days in August of 2001, more than 1,000 radio contacts were recorded. In contrast, November days (to date) had about 300 500 radio contacts.
- From mid-May until mid-September the FSS is open until midnight, due to heavy traffic.
- She has seen corporate jets parked wingtip to wingtip along the north and east edges of the apron. It is more normal for four to six corporate jets to be parked on the apron during the fishing and hunting season. Harrah's casino brings preferred customers to Dillingham for four months of the year, four Gulfstream flights per week. Other corporate jets belong to Crowley, Foss, barge companies, and Seattle fish processing businesses. Most visitors in corporate jets are transferred to charter aircraft (floatplanes such as GCI's fancy Beaver) and taken to luxury lodges in the area. Celebrity visitors have included Mel Gibson and Richard Gere. The GCI lodge costs \$5,000 per night.

#### 4. Helicopter Traffic

- Helicopter traffic is light and includes Jet Rangers and Aerostars, mostly used for surveys, fishing, and hunting.
- Last summer someone with a helicopter rented space from Yute Air. They were transporting sling loads.

#### 5. Medical Evacuations

- That day there had been three medical evacuations. Normally there are only about two per month, except the frequency increases during hunting season.
- Medevac airplanes include a Merlin, Navajo, and Lear Jet.

#### 6. Other Traffic

• The State Troopers have a Cub based at the airport, but also have two Caravans and two King Airs that use the airport.

#### 7. Navigational Aids

- The airport has a VOR, NDB, and ILS localizer.
- She has not heard of any FAA plans to upgrade navaids.

#### 8. Needed Airport Improvements

• The highest priority is a parallel taxiway to the Runway 19 threshold.

FAA Flight Service Station Mary Elen Cunningham November 15, 2001 Dillingham Airport Master Plan

- The runway should be extended about 2,000 feet so that it can be used by larger aircraft. The passenger demand is sufficient for 727 service.
- City water and sewer service is needed.
- Public access to the FSS is needed.

FAA Flight Service Station Jim Miller, Supervisor April 29, 2002 Dillingham Airport Master Plan

Sara Funk asked Jim Miller (283-3735) about the estimated time aircraft occupy the runway. The information is needed because the lack of a parallel taxiway requires backtaxiing, but the FAA advisory circular methodology on airport capacity assumes the presence of a parallel taxiway.

He estimated a jet or turbojet landing on Runway 1 would require 4 minutes and a jet or turbojet takeoff on Runway 19 would require 3 minutes, due to back-taxiing.

Smaller aircraft have developed "workarounds." Several taxi out together for takeoff on Runway 19. Also, since a taxiway is located about 2,000 feet from the Runway 1 threshold, many just use the 2,000-foot end of the runway to avoid back-taxiing. He stated that the "workarounds" probably should not be assumed when calculating the runway's capacity. When back-taxiing is not required, each landing and takeoff requires about 1 minute.

Appendix E - Interview & Meeting Summaries
FAA Navaids Technician

Zack Canright August 23, 2002 Dillingham Airport Master Plan

Zack Canright was interviewed by Jonathan Widdis, Sara Funk, and Suzanne Taylor of ASCG Incorporated. He provided a tour of the FAA facilities at the VOR and the site that has been mentioned for relocation of the airport. He is based in King Salmon. His phone number in King Salmon is 246-3314 and in Dillingham it is 842-5919. Email is Zachary.a.canright@faa.gov.

The UAT (Universal Asynchronous Transceiver) ground installation uplinks weather and terrain data, receives a signal from planes that is transferred to Anchorage center to be radar-like. The UAT is part of the Capstone program.

The airport used to have a glideslope, but it did not work because of reflection from terrain on the north. Newer technology would solve the problem. However, he does not know if/when one will be installed.

VORs will be turned off nationwide in 2007 (Coast Guard plan).

A formal kickoff meeting with DOT&PF, FAA, and Consultant personnel was held at the DOT&PF building in Anchorage. Those attending were:

Karie Smith	ASCG	505-247-0294
Michael D. Travis	TPECI	522-4337
John Lovett	FAA Airports	271-5446
Brad Sworts	ADOT&PF, PD&E	269-0533
Butch Douthit	Av. Des.	269-0605
Mark Mayo	DOT&PF Plng	269-0519
Jonathan Widdis	ASCG	267-6301
Sara Funk	ASCG	301-6815
Jack Melton	DOT&PF Planning	269-0509

Following the meeting of personnel listed above, Mark Mayo and the ASCG personnel met briefly with Bob Norton, Anna Walker, and Ron Strohman in the Leasing Department. These minutes document both meetings.

#### 1. Improvements Recommended by the Last Master Plan

- The FAA considered putting an air traffic control tower at Dillingham, but aircraft operation levels were not high enough. The traffic threshold for receiving a tower is even higher now. The FAA has a cost sharing program, in which the capital cost of a tower is split with the airport sponsor. However, the operational cost for an air traffic control tower is usually prohibitive for most airport sponsors the cost of a contract tower is about \$500,000 per year.
- No projects have been constructed at Dillingham in recent years.
- Joe Owens in Construction might know about past projects that were constructed.
- Runway rehabilitation is a 2003 project now. The reason it has not gone forward earlier is that the FAA wants runway safety area improvement to be part of the project. The budget is \$2.5 million. Butch Douthit said he is trying to do the minimum project possible, so that it will not be in conflict with the recommendations of the master plan. Currently the scope is to widen the safety area by 50 feet on the west side, up to the access road, and to resurface within the edge lights; the hump in the middle would not be fixed. An alternative to increasing safety area around the existing runway would be to move the runway northward.

#### 2. Encroachment Issues

- Providing access to the house on the northwest side of the airport is an issue.
- The cemetery, which is located on State property, is too close to the runway. It is located on a knoll above the runway elevation.
- There are fourplexes located on State property.
- Cleland has a well located on the southwest part of the airport property.

#### 3. Airport Needs

- More aircraft tiedowns are needed.
- Potable water service is needed. Now individuals have wells, but the water is not potable.
- Vehicular parking is needed; the long-term parking lot is located south of the tiedown apron.

#### 4. Floatplane Facilities

- The airport does not have a floatplane basin, although several users also operate on floats. Shannon's Pond is a float pond about 4 miles from the airport.
- Aleknagik Lake, which has a runway, has been considered as a place for aircraft to use for float and wheel changeovers. At the end of Lake Road there is a bad mix of boats, people, and floatplanes.

### 5. Security

- Security is a big issue currently. DOT&PF has been tasked with keeping parked cars 300 feet away from the Alaska Airlines terminal. Drop-off and pick-up is allowed within 300 feet, but no waiting. The requirement relates to service by aircraft with over 60 seats. Equivalent protection from a blast wall is possible, but much is unknown about this alternative.
- The requirement affects general aviation lease lots in Block 800, Lot 4B (Alaska Airlines), and Lot 4C (Freshwater Adventures).
- Other security concerns include signs, fencing, security badges, security command vehicles, and incident command center. The estimated cost of compliance with security requirements at five Central Region airports is \$17 million.
- At the north end of the runway, where the road and airport fence are very close, kids in snowmobiles have been known to try to jump the fence.

#### 6. Miscellaneous Information

- There is an M&O station in town.
- Alligator Jack, who lives next to the airport, is a source of information about land.
   He sometimes charters helicopters in his business. Currently, helicopters use the south end of the general aviation apron.
- The staffed Flight Service Station will remain as long as Senator Stevens is in office.
- A winter trails project is underway in the community. There are a number of strong advocates for trails in the community.

Appendix E - Interview & Meeting Summaries
Meeting with DOT&PF and FAA Personnel
November 13, 2001
Dillingham Airport Master Plan

- For information about stormwater discharge permits and pollution prevention plans, contact Dan Breeden, Environmental Safety Officer.
- Fish haul used to create a large amount of aviation cargo activity, with DC-6, C-130, and DC-8 aircraft using the airport.

Present:

Sara Funk, ASCG Mark Mayo, DOT&PF Rex Young, DOT&PF
Jonathan Widdis, ASCG Bob Norton, DOT&PF John Lovett, FAA
Suzanne Taylor, ASCG Ron Stroman, DOT&PF Gabriel Mahns, FAA
Butch Douthit, DOT&PF Brian Elliot, DOT&PF Patti Sullivan, FAA

Jonathan presented a review of Dillingham airport issues and Sara explained the forecasts.

<u>Tower</u> – A location is already designated for a tower. Operations costs may be prohibitive for a tower even if construction funding became available.

<u>Consolidated terminal</u> – No private entity wants to operate one. There is not a lot of call or incentive to have one. Mark pointed out that this is a non-State matter. Mark said that the Master Plan should neither preclude nor advocate a consolidated terminal, a general description and location could be included in plan. Don't spend too many option drawings on this.

<u>Crosswind runway</u> – There is a problem with a gravel-surfaced runway intersecting a paved runway.

Obstructions – The runway safety area is a critical issue in Dillingham. John asked if there are records of gravesites. Russian Orthodox faith requires above-ground markers (not flush). Butch thought that perhaps only those individuals buried nearest to the runway and above the runway elevation would have to be relocated and reinterred. There are graves that also impact the Wood River Road project. Patti said that cemetery relocations do happen. (Need to check the property line as regards the cemetery.) The FAA would like further clarification of cemetery ownership. It is believed that the trees are on city property. Patti further said that the FAA cannot modify the standards and there are compliance issues with NEPA. It is important to analyze the actual solutions without modifications to standards. Moving the runway somewhat would alleviate conflicts with the cemetery as well.

Relocation Alternatives – Butch liked the idea of shifting the runway alignment. Shifting the runway (rotating north end slightly to west) would help with rising topography to north and may reduce noise impact to residences. John said that it is important to look at land status vis-à-vis the refuge and the cost when considering relocation alternatives. Butch pointed out that a cross-wind runway is sometimes beneficial to Maintenance and Operations, and that Norm Heyano, Chris Koeppler and Andy (no last name) should be asked for their opinions. John agreed that with only one runway, efficiency is sometimes compromised during snow removal.

<u>Helicopters</u> – Patti said that helicopters need to meet standards. It would be well to have a separate, paved and painted, 150<sup>2</sup>-foot area for helicopters. Helicopters are used mostly for cadastral and BIA surveys. Look at Talkeetna where Era has a large involvement as well. ASCG hasn't seen Talkeetna's heliport, but knows of it. Leasing – the heliport should be separated off the apron but close enough for road access for fuel, etc.

**Ultralights** – None at this time.

Appendix E - Interview & Meeting Summaries

Dillingham Airport Master Plan

Meeting with DOT& PF & FAA

August 28, 2002

<u>Corporate Jets</u> – Patti asked how many use Dillingham Airport. Norm Heyano reports that there have been as many as seven at one time. Corporate jets can take up a great deal of the available apron space.

<u>Auto Parking</u> – Parking space is a major issue. Mark and the leasing representative suggested a parking lot and loop road similar to the new Bethel arrangement could be developed behind the terminal area. This would require moving the GA apron to the west. Patti suggested generating parking revenues.

Patti said that we should contact Scott Redge at ASA to ask him what runway length is needed for their operations at Dillingham. Sara said that ASCG is suggesting 6,400 feet in length.

Appendix E - Interview & Meeting Summaries

DOT&PF Airport Manager

Norman Heyano

November 14, 2001

Dillingham Airport Master Plan

Norman Heyano was interviewed by Jonathan Widdis, Karie Smith, and Sara Funk of ASCG Incorporated. Mark Mayo of DOT&PF also participated in the interview.

#### 1. Issues and Needs

- The runway condition is not good; this year he used 6,000 gallons of oil on crack sealing. Alaska Airlines has complained that the runway surface is too slick.
- Airport relocation could solve the problem of the inadequate runway safety area. Relocation was considered 20 years ago. A site at Mile 14 towards the lake was identified.
- A parallel taxiway is a high priority.
- Runway line of sight is a concern.
- It is difficult to keep fencing in good condition due to the swamp land. The airport was fenced around in 1990 1991.
- Vehicle parking is inadequate, particularly with the current 300-foot rule around the terminal. The long-term parking lot accommodates about 30 cars:
- Currently, the major aircraft parking concern is an area for corporate jets. He has seen a maximum of 8 corporate jets at the airport at once. The passengers are guests at the half-dozen lodges in the region. The corporate jets park on the north end of the apron. He would like to extend the paved apron westward. This is a security issue as well as a capacity issue.
- A crosswind runway is not a high priority for him. If provided, a crosswind runway on the southwest side of the airport would be best. For pilots of small general aviation aircraft, the runway would only need to be gravel and about 1,500 feet long.
- The Flight Service Station should be located in back of the general aviation apron.
- Public road access around the north end of the airport should be limited. The problem is providing access to the house northwest of the airport.
- The greatest demand for land leases is along the main apron, and there is no land available there.
- The general aviation apron should be paved.
- Another warm storage building is needed for airport maintenance equipment.
- There is demand for electrical power to tiedowns. The only tiedowns with power are those that are close to buildings with available receptacles.
- Better floodlighting of the apron is needed for security.
- There is also demand for T-hangars for airplanes with max. 45-foot wingspans. He would like one for his own airplane and knows several others who would also like a T-hangar. T-hangars are better for individual airplane owners than big hangars. The lots in Block 700 are too small for T-hangar development. (Mark Mayo commented that general aviation aircraft owners in the region might prefer to be based at Dillingham than at King Salmon, due to the strong winds at King Salmon.)

Appendix E - Interview & Meeting Summaries

DOT&PF Airport Manager

Norman Heyano

November 14, 2001

Dillingham Airport Master Plan

#### 2. Miscellaneous Information

- Aircraft tiedowns total 100.
- All fuel sales are by Alaska Cargo Services, which has 3,000 gallons of jet fuel storage and 6,000 gallons of aviation gasoline storage.
- Alaska Cargo Services is also the agent for Northern Air Cargo and Air Cargo Express (Big ACE).
- The Microwave Landing System (MLS) is out of service.
- There is not much demand for ski plane use at the airport.
- Aircraft with tundra tires use the paved runway.
- There are few noise complaints. Usually the complaints are not about jets, but about smaller aircraft flying low at the south end of the airport.
- There have been no requests for rental car operations on airport property.
- Helicopter operations are conducted by fish processors in the summer, Fish & Wildlife for surveys, by the Coast Guard, and for support of cellular communication sites. Most helicopters are Bell 206 and Aerostar, although the Coast Guard uses larger helicopters.
- Sometimes the Forest Service stages a few twin engine aircraft at the airport.
- There has been no fish haul activity for the last five years.
- Air carriers using the airport include Pen Air and Alaska Airlines, Frontier Flying Services, Grant Aviation (few passengers), Northern Air Cargo (twice per day during the summer, with increasing use of the B-727), Lynden (three times per week), Big ACE (three times per week), and Little ACE.
- Air taxis using the airport include Mulchatna, Bristol Bay, Alaska Island Air, Grant Aviation, Larry's, Hageland, Arctic Circle Air, Bay Air, Tucker, Iliamna, King, and Starflite (although no longer).
- Tikchik Narrows Lodge is the only lodge with based aircraft at the airport.
- The U.S. Fish & Wildlife has a Cessna 185 and Super Cub based at the airport. The agency also charters helicopters.
- Military aircraft, used by the Coast Guard and the National Guard, are occasionally seen at the airport and include the Sherpa and C-130.
- The ARFF/SRE building was constructed in 1996. The building has six bays, one housing the fire truck. The airport has 12 13 pieces of equipment (a list was provided). They are responsible for maintaining 60 lane miles of road. There is an equipment maintenance shop located in town.
- The fence has five automobile gates, three belonging to the State and two private.
- He is responsible for 11 airports in the region, which constitute most of the air taxi destinations from Dillingham.
- The City's sewage treatment plan is two miles east of the airport.
- The closest City water line is 1-1/2 miles from the airport.
- A generator provides emergency power for the ARFF building and runway lights.

February 11, 2002 Dillingham Airport Master Plan

Sara Funk called Norman Heyano (842-5511) for clarifications about fuel storage, ARFF equipment, and based aircraft.

PenAir sells a small amount of fuel, but Alaska Cargo Services is the primary seller of fuel. Fuel storage (gallons) at the airport is as follows:

	Avgas			Jet Fuel			
	Stationary	Mobile	Total	Stationary	Mobile	Total	
PenAir	2,500		2,500		4,000	4,000	
Alaska Cargo							
Services	6,000		6,000		3,000	3,000	
Yute Air Alaska	5,000		5,000				
Freshwater			l				
Adventures	2,000		2,000				
Grant Aviation		4,500	4,500				
Mulchatna Air	2,000		2,000				
Tucker Aviation	1,500		1,500				
Togiak Wildlife	1,000		1,000				
Bristol Bay Air	500		500				
Bay Air	1,000		1,000				
Alaska Island Air	300		300				
Tikchik Lodge	<u>1,</u> 000		1,000				
Total	22,800	4,500	27,300	0	7,000	7,000	

Heating fuel is also stored at the airport.

He confirmed that the one fire truck has 3,000 gallons of water, 400 gallons of AFFF, and 500 gallons of dry chemical. The airport also has a backup trailer with 5,000 gallons of water and a 3,000-gallon holding tank for water.

The discrepancy in numbers of based aircraft between the FAA's Terminal Area Forecasts (100) and the 5010 Form (52) probably relates to the fact that 52 is the number of private aircraft, and does not include commercial aircraft. From his recollection, commercial aircraft include the following: Tucker – 2 SEP and 1 MEP; Bristol Bay Air – 1 SEP; Bay Air – 1 SEP; Mulchatna – 2 SEP; Grant – 1 SEP; Arctic Circle Air – 1 SEP; Larry's – 1 SEP; Yute – 1 SEP; Alaska Cargo Services – 1 SEP; Freshwater Adventures – 2 MEP; Hageland – 1 SEP; PenAir, 4 Pipers, 1 Caravan, 1 Navajo; Alaska Island Air and Togiak Transportation have lots but base aircraft at nearby airports; A Ball – 1 SEP; Wildlife Refuge – 2 SEP; and Tikchik Lodge – 1 SEP.

Appendix E - Interview & Meeting Summaries

DOT&PF Airport Manager

Norman Heyano

April 11, 2002

Dillingham Airport Master Plan

Sara Funk called Norman Heyano (842-7133). He confirmed that there are no gliders or ultralights based at the airport. There are about 12 fixed wing aircraft that change to skis in the winter. He could not estimate the number of tundra tire aircraft.

He reviewed the list of bypass mail carriers. Alaska Airlines, PenAir, Air Cargo Express, Lynden, Northern Air Cargo, Alaska Central Express, and Frontier Flying Service carry mail from Anchorage. From Dillingham to the villages, PenAir, Grant Aviation, Larry's Flying Service, Arctic Circle Air, Yute, and Hageland carry bypass mail.



## MEMO TO THE FILE

Project: Dillingham Airport 1061-09

Date: June 14, 2002

From: Trevor Buffington, Environmental Scientist

On June 14, 2002 at 11:15 AM, I telephoned the Dillingham Airport Manager, Norm Heyano. I talked with Mr. Heyano about wildlife impacts to the Dillingham Airport. There have been no conflicts between wildlife and airport activities on airport property.

ADOT&PF Airport Manager Norman Heyano August 23, 2002 Dillingham Airport Master Plan

Norman Heyano was interviewed by Jonathan Widdis, Sara Funk, and Suzanne Taylor of ASCG Incorporated.

A warm storage building is needed in the ADOT&PF complex. The ARFF/SRE building has six bays, but the have 13 pieces of equipment plus a sweeper that does not fit in the building. He suggested a northward expansion of the existing heated sand building. It should be at least four bays with large doors.

The old, blue maintenance shed is not heated; it contains urea storage.

He would like to see a paved apron for corporate jets in the northwest corner of the GA Apron.

The perimeter fencing in the north part of the airport is in poor condition.



#### MEMO TO THE FILE

Project: Dillingham Airport 1061-09

Date: February 14, 2002

From: Trevor Buffington, Environmental Scientist

On February 14, 2002 at 10:00 AM, I visited the State Historical and Preservation Office (SHPO), which is the Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation, Office of History and Archaeology. I met with Joan Dale and we conducted a search of the SHPO maps and databases for notification of any historic, architectural, archaeological, and cultural resources. There were no historic, architectural, archaeological, or cultural resources documented by the SHPO within a one-mile radius of the Dillingham airport. Ms. Dale also mentioned there is an undocumented gravesite located just east of the runway.

City of Dillingham John Sorenson November 14, 2001 Dillingham Airport Master Plan

John Sorenson was interviewed by Jonathan Widdis, Karie Smith, and Sara Funk of ASCG Incorporated.

#### 1. Utility Information

- Nushigak Electric provides power and telephone service. The director is Steve Bushong.
- A water/sewer master plan is near completion. The airport is not served by the City's water system. The U.S. Fish & Wildlife built a fourplex near the airport and it has a well with good water.

#### 2. Air Service Information

- Last year Alaska Airlines stopped jet service from November to May.
- Frontier Flying Service began serving Dillingham recently.

#### 4. Sources of Community Information

- Andy Golia of the Bristol Bay Native Corporation would be a good source of information about economic development.
- Alice Ruby, who works at Choggiung Village Corporation and is on the City Council, is another good source of community information.

John Fulton, City Manager/Planning Director Meeting City of Dillingham November 15, 2001 Dillingham Airport Master Plan

Jonathan Widdis, Sara Funk and Karie Smith of ASCG Incorporated had a meeting at the City of Dillingham on November 15, 2001 with John Fulton, Planning Director regarding the Dillingham Airport Master Plan. The following information summarizes items discussed during the meeting.

#### 1. Airport Relocation

- One consideration for moving the airport is the amount of fog that comes in from the close proximity to the water.
- The community of Dillingham is expanding towards Aleknagik. Identified as a STIP project, a new road has been built and paved all the way to Aleknagik to connect the two communities. Aleknagik currently has a small private airstrip.
- He does not think it would be as expensive to relocate the airport and would like another location looked at. Any where from 5 to 13 miles from the existing airport.
- With looking at relocation, the existing airport could be kept as a smaller GA airport.
- He believes the Native Corporation (Choggiung) would be reasonable about allowing the relocation of the airport on their lands

#### 2. Terminal

- The basic comforts of travelers need to be addressed such as restrooms. He believes that the tourist traffic going to neighboring lodges will increase.
- Security should also be addressed. It would be very difficult for the city to provide security at the airport.
- Dillingham is one of the most expensive places to live because of the cost of fuel and having to cargo in most of their items.
- City interested in some joint use of terminal. They may be willing to be a tenant in a terminal.
- PenAir has been talking about moving their cargo operation out and expanding the hangar. However, this creates more problems with the fire marshal and parking.
- Currently, with the clear zone (no parking within 300 feet from the passenger area) everyone is parking on each other's lots.
- Mark Mayo, DOT&PF, indicated that there might be lower lease rates available if the city owned the terminal. If the FAA could come up with 50% of the costs for the new terminal, the city may be able to get other grants to pay the remaining construction costs.
- It would be nice to be able to provide a space for the corporate jets in a terminal and provide conference facilities, room for the FAA and a restaurant.

John Fulton, City Manager/Planning Director Meeting City of Dillingham November 15, 2001 Dillingham Airport Master Plan

- A terminal could provide for a FBO (GA and Commercial). Grant Air and Frontier are currently operating in the old Reeve hangar. This may be a good location for a terminal.
- His preferred spot for a terminal would be the location where Alligator Jacks house is located, Tract 3699 (Lot 2). Tract 5688 is owned by the State (Lot 9).

#### 3. Population/Economics

- The population of Dillingham is approximately 2,446. The majority of employment is in the government sector.
- There is a lot of non-taxable property located in Dillingham.
- Sales tax is down and lodging tax is down.
- Corporate jets land at the airport and don't have to pay a landing fee.

#### 4. Utilities

- Electricity has been extended out to the new road (Aleknagik Road). Water and sewer stops at the boathouse in the city. The entire road to Aleknagik will eventually be paved. The problem with extending the water and sewer to a proposed new airport location is shallow wells and sewer.
- The City is thinking about extending the water line to the airport. It may be done within the next 5 to 10 years.
- Currently the city water is from 4 wells, however two of the wells are dry. The two wells that are producing produce about 80 gallons per hour.
- Jim Vogel with Bristol Environmental is doing a Water/Sewer Plan for the city.
- The Kanakawok Hospital has its own water and sewer system. Surrounding villages use the hospital.
- The last Comprehensive Plan was done in 1985.

#### 5. Airport Advisory Committee

• John O'Connor, Planning Commission Advisory Committee and Dan Leyland would be good individuals to have on the Airport Advisory Committee. They both would have good information on the local perspective of the airport.

#### 6. Tourism/Economics

The school uses the airport when the team sports need to travel.

• Some tourist will go into town, however, they don't stay very long. The King Salmon airport has a terminal. The town also has a visitor center that was built by the US Fish and Wildlife.

John Fulton, City Manager/Planning Director Meeting
City of Dillingham
November 15, 2001
Dillingham Airport Master Plan

- He would like to see a cultural center built in Dillingham. This would give something for the tourist to do. However, it is not very likely that one will be built.
- There is a lot of HUD housing being built in Dillingham that is not taxable.

#### 7. Native Corporations

- The Native Corporation (Choggiung) owns the local Dillingham hotel. The board is reevaluating their mission. Their former CEO, Tim Troll, would like to see a cultural center in Dillingham. John Fulton would like to see the cultural center located by the airport.
- Tom Hawkins was the first CEO of Choggiung. He is now with BBNC Regional Corporation. BBNC is headquartered in Anchorage. They have not done very much for the City of Dillingham. BBNC sells gravel.

#### 8. Dillingham Amenities

- The community needs a large meeting facility. At this time they only have the school gym or city hall. The Choggiung tribal hall is bigger in size but not always available.
- There are probably 20 bed and breakfast facilities in Dillingham. There are two hotels, Dillingham Hotel and the Bristol Inn.
- Up the Nushagak River is a much better place for King Salmon fishing. The Choggiung controls much of the river. There are at least 6 big lodges and 24 smaller ones.
- Russel Nelson, Land Manager at Choggiung could give us more information about the lodges.
- There are float trips down the river that leave from the airport.
- The National Wildlife Service is trying to but restrictions on how many users can be on the lake at one time. The Togiak National Wildlife Management is located in Dillingham.
- Dillingham has much better weather than many of the surrounding communities.

### 9. Mining/Oil Development

- Omega Mine is located up Shotgun Hills. He believes this mine will be developed.
- The state is building a road from Pile Bay to Cook Inlet. This road would be used to export minerals out.
- This mine would be similar to the Red Dog Mine.
- The current price of gold has kept this project from happening.
- Drilling for oil outside Dillingham may be more feasible with the fish price down. The volume of fish may recover but the price may not.

Appendix E - Interview & Meeting Summaries
John Fulton, City Manager/Planning Director Meeting
City of Dillingham
November 15, 2001
Dillingham Airport Master Plan

### 10. City Planning

- He would like to adopt a zoning ordinance around the airport.
- Dave Stokes is the Public Work Director for Dillingham.

#### 11. Transportation

- An airport shuttle into town would be nice.
- Currently there is one car rental company (DJ Rentals).

Appendix E - Interview & Meeting Summaries

Dillingham City Manager

John Fulton

June 14, 2002

Dillingham Airport Master Plan

Suzanne Taylor called John Fulton (842-5211) for clarifications about completion dates for the Dillingham Water/Wastewater Master Plan, the new landfill, and the most recent update to the Comprehensive Plan of 1985.

Dillingham will be having public hearings regarding the Water/Wastewater Master Plan in August 2002. They hope for completion of the plan in winter (November or December) 2002.

The landfill construction is progressing. Phase 1 is completed and they hope that Phase 2, which includes the new landfill being ready for use and the closure of the old landfill, will take place by November 2002.

The Comprehensive Plan of 1985 was most recently updated in 1998. A new revision is in the works, however Mr. Fulton cannot predict when it will be completed because staff to work on it are not available at this time.

Appendix E - Interview & Meeting Summaries
City of Dillingham
V.I. Braswell, City Clerk
April 10, 2002
Dillingham Airport Master Plan

Sara Funk asked V.I. Braswell (842-5211) about the ownership of Shannon's Pond. The owner is Henry Shade.

Appendix E - Interview & Meeting Summaries
Choggiung LTD Village Corporation
Tim Troll, Chief Executive Officer
November 15, 2001
Dillingham Airport Master Plan

Tim Troll was interviewed by Jonathan Widdis, Karie Smith, and Sara Funk of ASCG Incorporated.

#### 1. Cultural Center

- The establishment of a Cultural Center has been his focus recently. The Cultural Center should not be located at the airport, but should be in the middle of town. The airport is a transition point; visitors need to be brought into the community where they will provide more economic benefit.
- The preferred site is near the library and Samuel Fox Museum. Other attractions in the vicinity include the cannery (which has growing visitor traffic), an old house, and a commercial fishing museum.
- The Cultural Center will also contain the Fish & Wildlife Visitors Center and the Samuel Fox Museum. It will have a meeting place, sorely needed within the community, for 100 to 150 people.

#### 2. Economy

- The economy has been based on fishing, and it is dismal. The cannery ran two of its four lines last year, and only one line this year. The cannery typically runs from late May until mid-August. Sport fishing has not followed the decline of commercial fishing.
- Most tourists to Dillingham are in-state residents. The visitor industry is small in Dillingham. It is just about the only industry that the community can do something about to promote economic development. Alice Ruby has been working hard on promoting tourism.
- The Corporation owns a lodge, Crystal Creek on Snake Lake. Fishing is not enough entertainment for guests. The lodge has taken guests on walrus-viewing tours, trips to see the Brooks Range, and visits to Togiak, which is a larger, but traditional, village that welcomes visitors.
- Hotel occupancy began a significant decline after the summer of 1996 and it has remained low.
- Bristol Bay Native Corporation has mineral resources. The corporation just opened a hard rock pit for the construction of sea wall protection this summer.
- Caribou and moose are hunted, and there is a small support industry associated with hunting. Most hunters are in-state residents.
- Bristol Bay Economic Development Corporation has developed a small halibut fishery. It has put some ice plants in villages on beaches for fish storage.
- Future development could include the exploitation of the nearby State and Federal Parks and Wildlife Refuges. There are lots of native allotments in the parks. With time, shareholders move away from the area and become less interested in protecting areas from inappropriate development. About half the Choggiung shareholders live outside the area, for example.

Appendix E - Interview & Meeting Summaries
Choggiung LTD Village Corporation
Tim Troll, Chief Executive Officer
November 15, 2001
Dillingham Airport Master Plan

#### 3. Floatplane Facilities

• The Choggiung Corporation wants to improve floatplane facilities at Shannons Lake. Half of the land (the half fronting the road) is owned by the corporation, and the other half is owned by a native allotee. The City also has a small parcel by the pond. A private land-based runway is on the native allotment. At least one of the lodges has floatplanes based at Shannons Pond. The project would be spearheaded by Russell Nelson, Land Manager.

Alaska Cargo Services Donald "Bo" Darden November 15, 2001 Dillingham Airport Master Plan

Bo Darden was interviewed by Jonathan Widdis, Karie Smith, and Sara Funk of ASCG Incorporated. Mark Mayo of DOT&PF also participated in the interview.

#### 1. Information about Alaska Cargo Services

- He runs a FAR Part 135 charter operation for cargo, sells fuel, and performs ground handling for Northern Air Cargo (NAC) and Air Cargo Express (ACE).
   He has been in the cargo business since 1976, associated with NAC since 1989, and with ACE since 1996.
- His charter business uses a DH-3 Otter. His aircraft operates on wheels and skis, with landings on tundra and beaches, as well as surfaced runways. He flies 300 500 hours per year, with each trip lasting 1 to 1-1/2 hours, to destinations within a 100-mile radius. An example of his business is the hauling of 100,000 gallons of fuel for the Omega gold mine exploration.
- The business employs four people full time, growing to six in the summer.
- The building, located next to the Flight Service Station, is 30' x 60'. It contains a small office and the remaining area is used for cargo.

#### 2. Fuel Sales

- Fuel storage includes a 4,000-gallon truck for aviation gasoline and a 3,000-gallon truck for jet fuel. He also has a 2,000-gallon fixed tank.
- He is the only seller of fuel at the airport and has been in that business for two years. With the rising cost of insurance, up \$8,000 in two years, he is not sure he will stay in the fuel sales business. Last year he sold \$900,000 of fuel, but the profit was only \$30,000.
- Annual fuel sales are between 700,000 and 800,000 gallons, evenly split between jet and avgas.

#### 3. Cargo

- Daily volumes of cargo that he handles vary widely from 10,000 to 80,000 pounds deplaned per day. Enplaned cargo is only about 25 percent of deplaned cargo.
- NAC operates five days per week; about three days per week with the B-727 jet. NAC used to have two flights per day, but has one flight per day now.
- ACE has a scheduled route from Anchorage to Dillingham to Port Heiden in a C-46 aircraft. Other flights are in DC-6 aircraft.

#### 4. Corporate Jets

Alaska Cargo Services Donald "Bo" Darden November 15, 2001 Dillingham Airport Master Plan

• In 2000, approximately 35 corporate jets flew to Dillingham, including a B-727 from Las Vegas and at least 25 Gulfstream G-IVs and G-Vs. In 2001 there were fewer corporate jets.

#### 5. Future Improvements

• He has talked to people in the Flight Service Station (FSS) about constructing a \$4 million Fixed Base Operator (FBO) complex that would include the FSS, a freight facility, and an aircraft repair facility. There is a big need for aircraft repair in Dillingham, although it is hard to make money at the business.

#### 6. Peak Activity

- The peak season starts in April with herring and then takes a month break before the salmon season starts. Then the hunting season starts and lasts through September. Permanent fund dividends and the holidays fuel activity after that. After December, business is very slow until April.
- On a busy day, 8 10 aircraft are fueled, half of which are small GA and half larger aircraft.

Appendix E - Interview & Meeting Summaries
Nora Harder, Cracker Box Gift Shop Meeting
November 15, 2001
Dillingham Airport Master Plan

Jonathan Widdis, Sara Funk and Karie Smith of ASCG Incorporated had a meeting at the Cracker Box Gift shop located at the airport in the Starlite Hanger on November 15, 2001 with Nora Harder, Owner, regarding the Dillingham Airport Master Plan. The following information summarizes items discussed during the meeting.

#### 1. Airport Needs

- Public restrooms.
- Additional parking.
- Parking and surrounding airport lighting.
- Car rental should be located on the airport property.

#### 2. Other Items

- The Cracker Box gift shop provides ice to many of the private jets.
- Nora Harder would like to be notified of the meetings.

Nora Harder P.O. Box 824 Dillingham, AK 99576

D&J Car Rental Connie Pearson November 15, 2001 Dillingham Airport Master Plan

Connie Pearson, P.O. Box 1169, Dillingham, was interviewed by Jonathan Widdis of ASCG Incorporated.

#### 1. Information Learned

- They are located off-airport, 2 miles from the terminal area, on the east side of the runway. The Pen Air terminal has a direct phone line to them for customers to use. One reason they do not want to be at the airport is that there are no wash facilities there. Also, with the current situation, they are not tied to a counter and can receive a phone call anywhere. However, they might reconsider and relocate if a new terminal were built. The Pen Air terminal has no amenities. A coffee shop and an automatic teller machine would be good amenities to have in a passenger terminal.
- They have 11 cars. They are very busy in the summer.
- The community loses a lot by not catering to tourists. For example, there used to be a lot of passengers that got off the Reeve Aleutian flight on its stop between Anchorage and the Pribilofs. There was no information or services for them.

Yute Air, Alaska Central Express, Hageland, Lynden, Larry's Flying Service Jeff Jolley November 15, 2001 Dillingham Airport Master Plan

Jeff Jolley of Yute Air was interviewed by Sara Funk, Karie Smith, and Jonathan Widdis of ASCG Incorporated. Mr. Jolley can be reached at:

Phone 842-5533 Fax 842-1001

Yute Air rents space to Larry's and Hageland. Yute provides ground handling services for Lynden and Alaska Central Express.

Yute Air was in the process of moving – trading buildings with Fresh Water Adventures next door.

#### 1. Aircraft

- Yute bases one Cessna 207 at the airport. In Anchorage the airline bases Casas and Navajos, and those aircraft are flown to Dillingham sometimes.
- Hageland has one 207.
- Larry's has a Cherokee.

#### 2. Schedules

- Yute Air has 5-6 flights per day, with the number depending on the mail load. They fly to villages in the area Manokotak, Togiak, then upriver.
- Lynden flies a Herc to Dillingham three times per week (Tuesday, Thursday, and Saturday).
- Alaska Central Express -- printed schedule provided with following information:
  - o ANC DLG with one stop, 7 a.m. five days per week
  - DLG ANC 9:50 a.m., nonstop three days per week, one stop two days per week
  - o Flight stop is King Salmon.
  - Provides flagstops and charters on request; lists freight rate for DLG to Togiak (TOG)

#### 3. Cargo

- Cargo volume is fairly consistent through the year in the summer there is more bypass mail, but at Christmas time, more packages.
- Yute Air averages 3,000 pounds per day.
- Lynden averages 20,000 pounds per load.
- Alaska Central Express (started in May) averages 10,000 pounds per trip, except lighter on Sunday.

Appendix E - Interview & Meeting Summaries
Yute Air, Alaska Central Express, Hageland, Lynden, Larry's Flying Service
Jeff Jolley
November 15, 2001
Dillingham Airport Master Plan

## 4. Other:

- The building contains administration, hangar, and mail room.
- A parallel taxiway would be a good improvement.

Flight Alaska (formerly Yute Air)

Brian Palmer

August 23, 2002

Dillingham Airport Master Plan

Brian Palmer was interviewed by Jonathan Widdis, Sara Funk, and Suzanne Taylor of ASCG Incorporated. The hangar part of the building is shared by Larry's and Hageland. Flight Alaska's maintenance is not done in Dillingham. Flight Alaska initiated service to Nome four months ago (7-9) days 7 days per week) in King Air aircraft. Alaska Central Express now has only one flight per day; it used to be more. Upstairs in the building is temporary living quarters.

# Appendix E - Interview & Meeting Summaries Field Observations August 23, 2002 Dillingham Airport Master Plan

It was verified that the runway has no paved shoulders, blast pads, or distance to go signs.

The airport access road is asphalt-paved, with two-12 foot lanes and a two-foot shoulder.

The road around the GA Apron is gravel, 30 feet wide, and in good condition.

Photographs were taken of airside, landside, and off-airport areas.

Estimates of building floor area devoted to different functions were made, based on building footprints and visual estimates.

## **APPENDIX F**

## **ISSUES SURVEY & AIR CARRIER SURVEY**

issues Survey	I
Remarks	
Update	
Air Carrier Survey	
Air Carrier/Air Taxi Questionnaire	
The Controller Land Agoodomano	

## **Issues Survey**

Questionnaires regarding airport issues were distributed in November 2001.

## Dillingham Airport Master Plan Update Issue Survey

Surveys were sent to everyone on the mailing lists and handed out at the public meeting on November 14, 2001. 17 Surveys were completed and returned. Choices with the greatest number of respondents are highlighted.

ISSUES	Please circle one rati	ng that expresses your	opinion of the issue
Failing Runway Pavement	Very Important 12	Important 4	Not Important 0
Inadéquaté Runway Safety Area	Very Important 💆	Important 6	Not Important 0
Need for a Parallel Taxiway	Very Important 6	Important 📆	Not Important 2
Runway Line-of-Sight	Very Important 🔯	Important 6	Not Important 0
Improved Fencing	Very Important 0	Important [1]	Not Important 5
Inadequate Long-term Vehicle Parking	Very Important 6	Important 🗒	Not Important 3
Additional Aircraft Parking	Very Important 1	Important 🗒	Not Important 6
Crosswind Runway	Very Important 💆	Important 4	Not Important 3
Wetlands Protection	Very Important 2	Important 🗓	Not Important 🗓
Flight Service Station Access	Very Important 3	Important 💆	Not Important 4
OTHER ISSUES?			
Short-term Parking	Very Important 1	Important 2	Not Important
One Combined Terminal	Very Important 4	Important 1	Not Important
Loading and Unloading Zone	Very Important	Important 1	Not Important
<b>Building Improvements</b>	Very Important I	Important	Not Important
Water Improvements	Very Important 4	Important	Not Important
Airport Cleanliness/Appearance	Very Important 2	Important 1	Not Important
Airport Maintenance	Very Important 1	Important	Not Important
<b>Extension of City Sewer System</b>	Very Important 1	Important	Not Important
T-Hangars	Very Important	Important 1	Not Important
Distance to Long-term Parking	Very Important	Important 1	Not Important
Paved Access Road to Flight Service Station	Very Important 1	Important	Not Important
Customer Service	Very Important 1	Important	Not Important
Security	Very Important 2	Important	Not Important
Trees	Very Important 1	Important	Not Important
Relocation of Runway	Very Important 1	Important	Not Important

#### REMARKS

Any concerns or ideas about immediate and long-range future airport development and operation?

- In order for all of the above thing to be included in a good plan, the runway will need to be moved or at least should be. Not only is parking an issue but space inside the terminals is a big issue. There is only one exit to the outside parking area in each terminal. The main one has only one three-foot door opening. It is almost impossible to get in or out with bags. I would bet the building is over capacity for safety on most summer days.
- I am concerned that the first image of our town is an inadequate terminal It is embarrassing to bring any of my guests and family through it. What a disgrace!
- Security non-existent. Too many drunks.
- If you were a tourist and forced to utilize the bathrooms at the Dillingham Airport you probably wished you never had to.
- Front of terminals looks like an industrial junkyard.
- Pilots want enclosed parking for planes.
- PenAir Terminal is standing room only from spring to fall.
- The Dillingham Airport needs a single, unified terminal area to provide better service, security, and ease of access to the public.
- A crosswind runway would be a nice addition, then relocate the current private airplane parking. Then utilize what is currently private airplane parking for long-term auto parking, thus making the airport more user-friendly.
- We have basic health/safety issues Passenger access is horrible. We are one of Bristol Bay and Western Alaska's major support hubs. We don't need to build a runway, we just need to maintain and finish what infrastructure we have.
- Will this have an effect on Dillingham's roads?
- Airport relocation is a short/long term issue, important to development and future growth of the facility. Land use
  development at current facility is residential, not commercial, and will always tend to restrict airport operations.
- Should be a major terminal facility with leased space for airport-related businesses.

## Dillingham Airport Master Plan Update

ISSUES	Please circle one rating that expresses your opinion of the issue.				
Failing Runway Pavement	Very Important	Important	Not Important		
Inadequate Runway Safety Area	Very Important	Important	Not Important		
Need for a Parallel Taxiway	Very Important	Important.	Not Important		
Runway Line-of-Sight	Very Important	Important	Not Important		
Improved Fencing	Very Important	Important	Not Important		
Inadequate Long-term Vehicle Parking	Very Important	Important	Not Important		
Additional Aircraft Parking	Very Important	Important	Not Important		
Crosswind Runway	Very Important	Important	Not Important		
Wetlands Protection	Very Important	Important	Not Important		
Flight Service Station Access	Very Important	Important	Not Important		
OTHER ISSUES?					
	Very Important	Important	Not Important		
	Very Important	Important	Not Important		
	Very Important	Important	Not Important		
REMARKS					
Any concerns or ideas about immediate and lon	g-range future airport	development and opera	ation?		
<del></del>					
			·		
OPTIONAL:					
Your name, phone number, address:					
			<del></del>		
Your association with the airport (passenger, air	port tenant, private pi	lot, etc.):			
Would you like to be on the mailing list for Dill	ingham Airport Maste	r Plan newsletters?	Yes No		
Please return the survey as soon as you can to the	e address below via fa	ix or mail:			
Jonathan Widdis ASCG Incorporated 301 Arctic Slope Avenue Anchorage, AK 99518	Phone: 907-267-630 Fax: 907-349-42 e-mail: jwiddis@aso	13			

## Air Carrier Survey

The air carrier and air taxi businesses listed below were given a questionnaire based on the Airport master Planning Questionnaire recommended in FAA Advisory Circular 150/5070-6A, Airport Master Plans. The blank questionnaire is included in this appendix. Though no questionnaires were returned, ASCG team members have interviewed Jeff Jolley and Beau Darden who represent the following airlines at Dillingham: Yute Air, Larry's Flying Service, Hageland Aviation, Air Cargo Express, Northern Air Cargo, Lynden Air Cargo, Alaska Cargo Services, and Alaska Central Express. Summaries of these interviews are included in Appendix E.

Air Carrier / Air Taxi	Location
Alaska Central Express	Anchorage
Alaska Island Air, Inc.	Togiak
Arctic Circle Air	Anchorage
Armstrong Air Service	Dillingham
Bay Air	Dillingham
Bristol Bay Air Service	Dillingham
Freshwater Adventures, Inc.	Dillingham
Frontier Flying Service, Inc.	Fairbanks
Grant Aviation	Anchorage
Lynden Air Cargo	Anchorage
Mulchatna Air	Dillingham
Northern Air Cargo	Dillingham
Pen Air and Alaska Airlines	Dillingham
Shannon's Air Taxi	Dillingham
StarFlite, Inc.	Dillingham
TikChik Adventures	Dillingham
Tikchik Narrows Lodge, Inc.	Anchorage
Togiak Transportation Services, Inc.	Dillingham
Tucker Aviation, Inc.	Dillingham
Yute Air Alaska	Dillingham

## Air Carrier/Air Taxi Questionnaire Dillingham Airport Master Plan

Contact information	
Name	Telephone
Organization	Fax
Address	
City, State Zip	_
E-mail	Date
Air Carrier/Air Taxi Profile	
Services Provided (list FAR Part for operations)	
	· · · · · · · · · · · · · · · · · · ·
Arrival/Departure Schedule (typical for each season)	
Routes (with stage lengths)	
Number of employees at airport	
Inventory of facilities	

## Air Carrier/Air Taxi Questionnaire Dillingham Airport Master Plan

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The next questions ask about your anticipated level of operation over a twenty-year period. Please provide figures based on desired changes to your fleet if airport facilities were expanded to meet your needs.

A. Forecast of Passenger Enplanements	Forecast				
	Base Year	5-Year	10-Year	20-Year	
_	2000/2001	2006	2011	2021	
Annual					
Average Day - Peak Month					
Peak Hour (average day - peak month)					
Peak Month in 1999					
Time of day for peak enplanements					
Time of day for peak deplanements					

#### **B. Forecast of Aircraft Departures**

Average Day (by type of aircraft, include different landing gear):

		Forecast					
	Base Year	5-Year	10-Year	20-Year			
Type of Aircraft	2000/2001	2006	2011_	2021			
1)				•			
2)							
3)		···-					
4)							
5)							
6)							

## Air Carrier/Air Taxi Questionnaire Dillingham Airport Master Plan

Peak Hour (average day - peak month by type of aircraft, include different landing gear):

			1 010	Cast	
		Base Year	5-Year	10-Year	20-Year
	Type of Aircraft	2000/2001	2006	2011	2021
1	)				
2					
3	)			4	
4	)				
5	)				
6	)				
C. Forecast	of Deplaned Cargo		Fore	cast	
(in pounds o	or tons - circle one)	Base Year	5-Year	10-Year	20-Year
		2000/2001	2006	2011	2021
				·,	
	Annual				
	Average Day - Peak Month			_	· · · · · · · · · · · · · · · · · · ·
	Peak Hour (average day - peak month)				
	Peak Month in 1999				
	. Time of day for peak deplanements				
% Mail:	Method of Unloading:			<u></u>	•

% Mail: % Freight

# Air Carrier/Air Taxi Questionnaire Dillingham Airport Master Plan

D. Forecast of Enplaned Cargo		Fore	cast	
(in pounds or tons - circle one)	Base Year	5-Year	10-Year	20-Year
	2000/2001	2006	2011	2021
Annual				
Average Day - Peak Month				
Peak Hour (average day - peak month)				
Peak Month in 1999		· ··		
Time of day for peak deplanements		<u></u>	].	
% Mail: Method of Loading:				·
% Freight				
E. Forecast of Aircraft Parking				
•		Fore	cast	
	Base Year	5-Year	10-Year	20-Year
_	2000/2001	2006	2011	2021
With loading bridges to terminal				
With at-grade terminal access				
Overnight				
Other:				
Parking Method (power out, power back, or push back)	-			-

# Air Carrier/Air Taxi Questionnaire **Dillingham Airport Master Plan**

### F. Forecast of Support Facilities

		Forecast				
		Base Year	.5-Year	10-Year	20-Year	
		2000/2001	2006	2011	2021	
Building area i	requirements:			·   · · · · · · · · · · · · · · · · · ·		
Passeng	er processing					
Car	go processing	,				
,	Administrative					
Other:						
	Tota					
Hangar/Maintenance Shop R	equirements:					
	Area					
	Dimensions					
	Height					
T	ype of Aircraft			1		
	No. of Aircraft					
Outdoor Areas (e.g. ca	argo staging):	[ <del></del>				
	Туре					
	Size					
Automobile Parking (r	no. of spaces)					
. Remarks						
escribe Passenger/Baggage Processing (ci	rcle one):					
Security screening required?	YES	NO				
Baggage claim device?	YES	NO				
Any changes anticipated?	YES	NO				
If yes, describe:						
,,						

# Air Carrier/Air Taxi Questionnaire Dillingham Airport Master Plan

Location of Building/Hangar (describe):	
Comments on runways, taxiways, aprons:	
Comments on navaids and lighting:	
Comments on fueling and utilities:	
Comments on roads and parking:	
Other comments:	
<u> </u>	

If you have questions about the survey, please call Jonathan Widdis at 1-800-478-4153. Please fax or mail the completed survey to Jonathan Widdis, ASCG Incorporated, 301 Arctic Slope Avenue, Anchorage, AK 99518, fax 907-349-4213.

# APPENDIX G WIND ANALYSIS

#### Wind Analysis

The most desirable runway orientation has the highest wind coverage and the least amount of crosswind. Runways should be oriented with the prevailing wind, so aircraft can land and takeoff into the wind. Wind coverage is the percent of the time crosswind components are below an acceptable velocity. The desirable wind coverage for an airport is 95 percent computed on the basis of maximum crosswind speeds that are defined for different sizes of airplanes (lower for smaller airplanes). For the smallest airplanes, which are the majority of the fleet using Dillingham Airport, the acceptable crosswind component is 10.5 knots (12 miles per hour).

Users of small airplanes at Dillingham Airport have expressed the need for another runway that would be oriented with the strong crosswinds that occur at times. A crosswind runway, designated 12-30, appears on the 1991 Airport Layout Plan. Also, a crosswind runway is programmed for construction after Fiscal Year 2005. One of the tasks of this Airport Master Plan Update is to verify the need for a crosswind runway.

The latest wind analysis, using 1992 – 1999 wind data, is on the following pages. The table below presents the results of this analysis and the results of the previous wind analyses.

			A-III, B-III,
Airport Reference Code <sup>1</sup>	A-I and B-I	A-II and B-II	C-I through C-III
Max. Crosswind (knots)	10.5	13	16
Wind Coverage, 1992 - 1999 Data	93.98%	96.97%	98.90%
Wind Coverage, 1972 – 1975 Data <sup>2</sup>	Not provided	91.18%	Not provided

Both the updated and the previous wind analyses indicate that wind coverage for smaller airplanes is under 95 percent, although the latest data shows substantially higher coverage. Wind coverage is so close to 95 percent that a crosswind runway could have an orientation several degrees different than the proposed Runway 12-30 and yet provide wind coverage of more than 95 percent.

The 1991 Airport Layout Plan shows that the wind coverage of a future Runway 12-30 would be 86.55 percent at 13 knots; with both runways, the wind coverage would be 99.84 percent at 13 knots.

<sup>&</sup>lt;sup>1</sup> FAA categories related to airplane approach speed and wingspan. Aircraft approach categories are: A, less than 91 knots; B, 91-120 knots; and C, 121-140 knots. Airplane design Groups are: I, less than 50 feet; II, 50 – 78 feet; and III, 79 – 117 feet:

<sup>&</sup>lt;sup>2</sup> National Weather Service, from 1991 Airport Layout Plan

# DILLINGHAM AIRPORT WIND OBSERVATIONS and WIND COVERAGE

STATION: Dillingham (PADL), Alaska

RUNWAY ORIENTATION: 26.50 DEGREE, from Airport Property Plan dated 4/15/83

CROSSWIND COMPONENT: 10.50 KNOTS TAILWIND COMPONENT: 60.00 KNOTS WIND COVERAGE: 93.98 %

		Н	URLY OF	SERVATI	ONS OF	WIND SP	EED (KN	OTS)	41	
	0-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	OVER	TOTAL
DIRECTIO	N									
1	348	1091	1552	1549	368	97	9	0	1	5015
2	279	997	1308	977	160	33	0	0	2	3756
3	287	830	944	546	106	18	2	0	0	2733
4	284	945	993	577	116	20	5	0	1	2941
5	216	782	864	608	13-1	22	0	0	0	2623
6	232	738	838	642	136	29	0	0	0	2615
7	176	559	551	265	52	10	0	0	0	1613
8	134	443	373	213	22	1	0	0	0	1186
9	119	325	320	133	19	2	0	0	0	918
10	95	333	313	193	27	5	0	0	0	96,6
11	90	344	318	192	54	18	1	0	0	1017
12	112	404	440	292	133	31	2	0	0	1414
13	113	374	4.86	403	147	38	1	0	0	1562
14	111	472	528	303	79	15	0	0	0	1508
15	13.0	436	452	255	51	22	0	0	0	1346
16	108	496	624	311	29	1	0	0	0	1569
17	96	481	725	376	51	6	0	0	0	1735
18	121	546	809	406	67	6	1	0	1	1957
19	150	509	604	250	54	8	0	.0	0	1575
20	148	727	718	3.04	24	14	6	0	0	1941
21	226	874	728	333	34	2	1	0	1	2199
22	202	634	697	374	29	5	1.	0	0	1942
23	188	501	5.74	290	30	0	0	0	0	1583
24	218	511	509	233	27	5	0	0	0	1503
25	213	473	327	140	20	3	0	0	0	1176
26	196	456	247	96	5	2	0	0	0	1002
27	242	471	211	91	8	2	0	0	0	1025
28	242	421	181	77	3	0	0	0	0	924
29	312	311	106	45	5	1	0	0	0	78 <u>0</u>
30	366	304	69	24	1	0	1	0	0	765
31	2.93	274	99	12	1	0	0	0	0	679
32	243	352	203	33	4	1	0	0	0	836
33	722	506	370	94	14	1	0	0	1	1708
34	291	782	799	515	87	2.0	2	0	0	2496
35	261	910	1224	1196	385	78	6	0	0	4060
3.6	348	1093	1834	1938	683	128	6	0	0	6030
0	0	0	0	0	0	0	0	0	0.	Q
TOTAL:	7912	20705	21938	14286	3162	644	44	0	7	68698

REFERENCE: Appendix 1 of AC 150/5300-13, Airport Design, including Changes 1 through 6.

NOTES: Wind data is from Univ of Alaska, Anchorage, ENRI dated 1992-1999.

# DILLINGHAM AIRPORT WIND OBSERVATIONS and WIND COVERAGE.

STATION: Dillingham (PADL), Alaska

RUNWAY ORIENTATION: 26.50 DEGREE, from Airport Property Plan dated 4/15/83

CROSSWIND COMPONENT: 13.00 KNOTS TAILWIND COMPONENT: 60.00 KNOTS

WIND COVERAGE: 96.97 %

		н				WIND SP		OTS)	4.1	
	03	4-6	7-10	11-16	17-21	22-27	28-33	34-40	OVER	TOTAL
DIRECTIO										
1	348	1091	1552	1549	3:68	97	9	0	1	5015
2	279	997	1308	977	160	33	0	0	2	3756
3	287	830	944	546	106	18	2	0	0	2733
4	284	945	993	57 <b>7</b>	116	2.0	5	0	1	2941
5	216	782	864	608	131	22	0	0	0	2623
6	232	738	838	642	136	29	0	0	0	2615
7	176	559	551	265	52	10	0	0	0	1613
8	134	443	373	213	22	1	0	0	0	1186
9	119	325	320	133	19	2	0	0	0	918
10	95	333	313	193	27	5	0	0	0	966
11	90	344	318	192	54	18	1	0	0	1017
12	112	404	440	292	133	31	2	0	0	1414
1.3	113	374	486	4 0 3	147	38	1	0	0	1562
14	111	472	528	303	79	1.5	0	0	0	1508
15	130	436	452	255	51	22	0	0	0	1346
16	108	496	624	3/11	2.9	1	0	0	0	1569
17	96	481	725	376	51	6	0	0	0	1735
18	121	546	809	406	67	6	1	0	1	1957
19	150	5.09	604	250	54	8	0	0	0	1575
20	148	727	718	304	24	14	6	0	0	1941
21	226	874	728	333	34	2	1	0	1	2199
22	202	634	697	374	29	5	1	0	0	1942
23	188	501	574	290	30	0	0	0	0	1583
24	218	511	509	233	27	5	0	0	0	15.03
25	213	473	32.7	140	20	3	0	0	0	1176
2.6	196	456	247	96	5.	2	0	0	0	1002
27	242	471	211	91	8	2.	0	0	0	1025
28	242	421	181	77	3	0	0	0	0	924
29	312	3.11	106	45	5	1	0	0	0	780
30	366	304	69	24	1	0	1	0	0	765
31	2'93	274	99	12	1	0	0	0	0	679
32	243	352	203	33	4	1	0	0	0	836
33	722	506	370	94	1.4	1	0	0	1	1708
34	291	782	799	515	87	20	2	0	0	2496
3.5	261	910	1224	1196	385	78	6	0	0	4060
36	348	1093	1834	1938	683 ·	128	6	0.	0	6030
0	0	0	0	0	0	0	0	0	0	0
TOTAL:	7912	20705	21938	14286	3162	644	44	0	7	68698

REFERENCE: Appendix 1 of AC 150/5300-13, Airport Design,

including Changes 1 through 6.

NOTES: Wind data is from Univ of Alaska, Anchorage, ENRI dated 1992-1999.

# DILLINGHAM AIRPORT WIND OBSERVATIONS and WIND COVERAGE

STATION: Dillingham (PADL), Alaska

RUNWAY ORIENTATION: 26.50 DEGREE, from Airport Property Plan dated 4/15/83

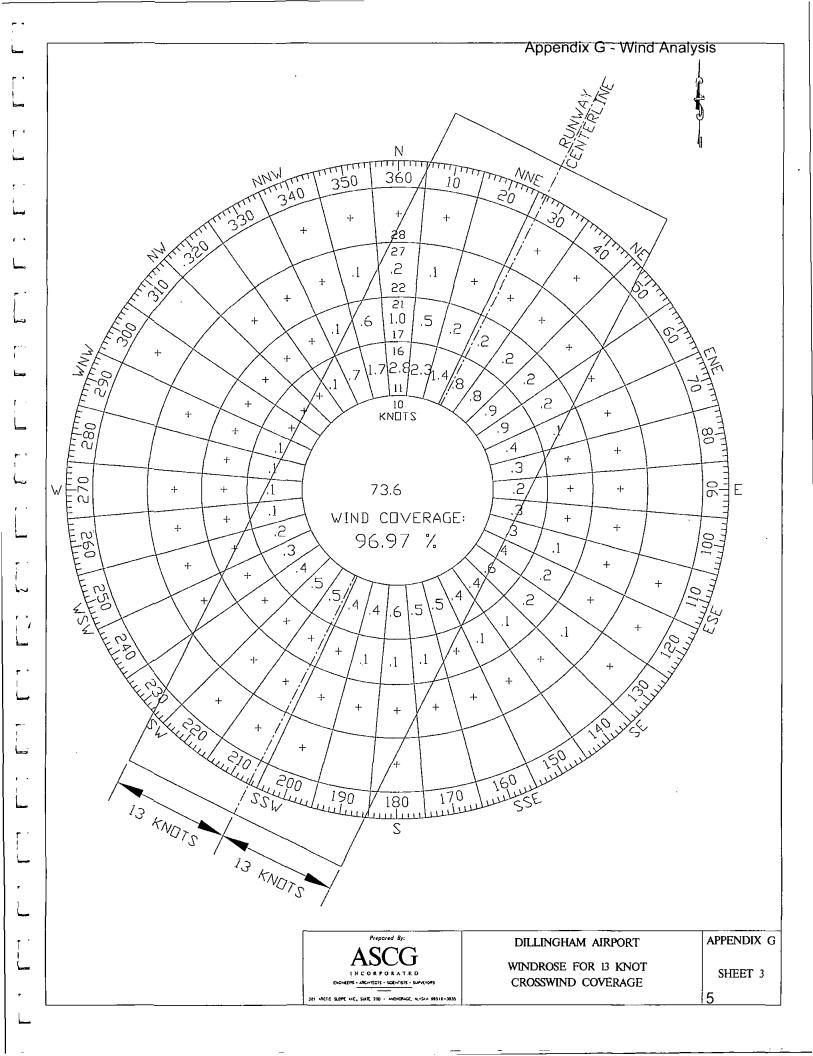
CROSSWIND COMPONENT: 16.00 KNOTS TAILWIND COMPONENT: 60.00 KNOTS WIND COVERAGE: 98.90 %

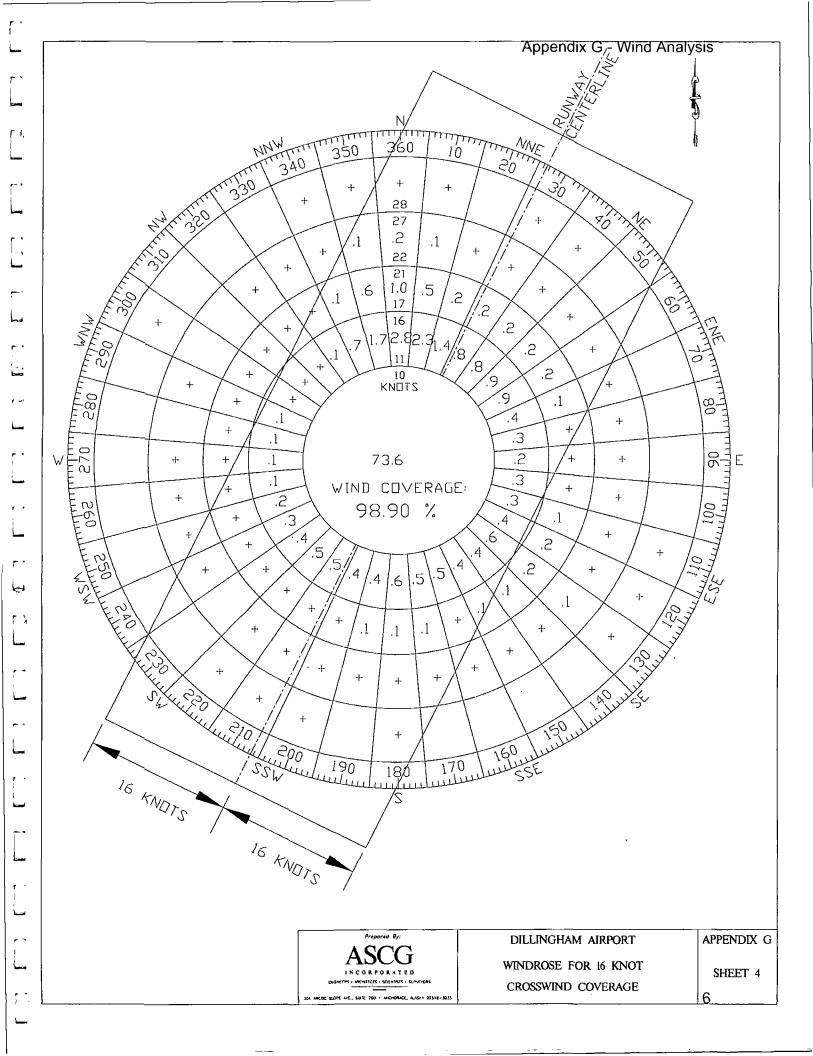
		нс	UKLY OE	SERVATI		WIND SP	EED (KN	OTS)	41	
	0-3	4 - 6	7-10	11-16	17-21	22-27	28-33	34-40	OVER	TATOT
DIRECTIO	N									
1	34'8	1091	1552	1549	368	97	9	0	1.	5015
2	279	997	1308	977	160	·33	0	0	2	3756
3	287	83.0	944	546	106	18	2	0	0	2733
4	284	945	993	577	116	20	5	0	1	2941
5	216	782	864	608	131	22	0	0	0	2623
6	232	7.38	838	642	136	2,9	0	0	0	2615
7	176	559	551	265	52	10	0	0	0	1613
8	134	443	373	213	22	1	0	0	0	1186
9	119	325	320	133	19	2	0	0	0	918
10	95	333	313	193	27	5	0	٥	0	966
11	90	344	318	192	54	18.	1	0	0	1017
12	112	4.04	440	292	133	31	2	0.	0	1414
13	113	374	4:86	403	147	38	1	0	0	1562
14	111	4.72	528	303	79	15	0	0	0	15.08
15	130	436	452	255	51	22	0	0	0	1346
16	108	496	624	311	29	1	0	0	0	1569
17	96	481	725	376	51	6	0	0	0	1735
1.8	121	546	809	4 0,6	67	6	1	0	1	1957
19	150	509	604	250	54	8	0	0	0	1575
20	148	727	718	304	24	14	6	0	0	1941
21	226	874	72 <b>8</b>	333	34	2	1	0	1	2199
22	202	634	697	3'74	29	5	1	0	0	1942
2-3	188	501	574	290	30	0	0	0	0	1583
24	218	511	509	233	27	5	0	0	0	1503
25	213	473	327	140	20	3	0	0	0	1176
26	196	456	247	96	5	2	0	0	0	. 1002
27	242	471	211	91	8	2	0	0	0	1025
28	242	421	181	7 <b>7</b>	3	0	0	0	0	924
29	312	311	106	45	5	1	0	0	0:	780
3.0	366	304	69	24	1	0	1.	0	0	765
31	293	274	99	12	1	0	0	.0.	0	679
32	243	352	2.03	33	4	1	0	0	0	836
33	722	506	370	94	14	l	0	0	ı	1708
34	291	782	799	515	87	20	2	0	0	2496
35	261	910	1224	1196	3.85	78	6	0	0	4060
36	348	1093	1834	1938	683	128	6	0	0	6030
0	0.	0	0	0	0	0	0	0	0	0
TOTAL:	7912	20705	21938	14286	3162	644	44	0	7	68698

REFERENCE: Appendix 1 of AC 150/5300-13, Airport Design,

including Changes 1 through 6.

NOTES: Wind data is from Univ of Alaska, Anchorage, ENRI dated 1992-1999.

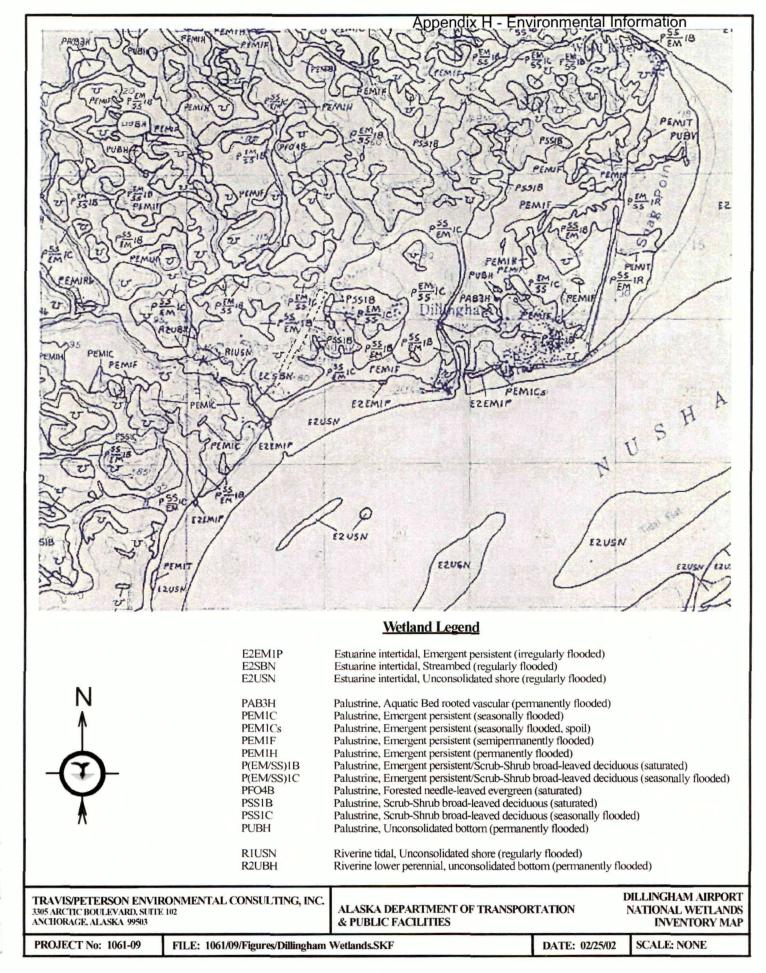




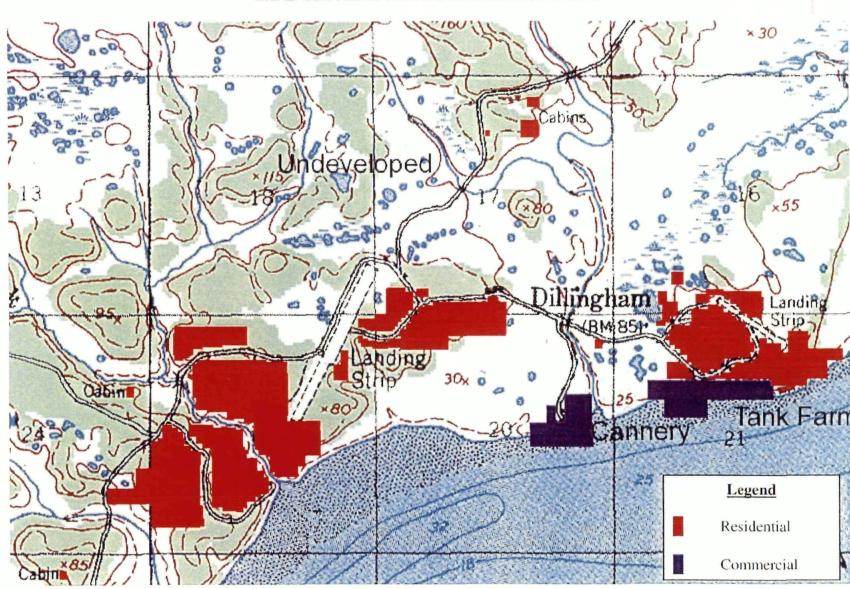
## **APPENDIX H**

## **ENVIRONMENTAL INFORMATION**

National Wetlands Inventory Map	1
Land Use Near the Dillingham Airport	2
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Site Assessment Plus Report, Dillingham Airport	5
Site Assessment Plus Report, Bulk Fuel Storage Facility	7
Site Assessment Plus Report, Hospital	
Site Assessment Plus Report, D J Enterprises	9
Site Assessment Plus Report, Commercial Air Carrier	10
Site Assessment Plus Report, Wren Air Inc.	11
Site Assessment Plus Report, Air Service Company	12
Site Assessment Plus Report, Electrical Generation Facility	1.3
Site Assessment Plus Report, Automobile Repair Shop	14
Site Assessment Plus Report, University	15
Site Assessment Plus Report, Clinic	16
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## LAND USE NEAR THE DILLINGHAM AIRPORT



#### **Environmental References:**

Alaska Department of Highways. 1963. Route Reconnaissance Report, Dillingham to Aleknagik. Project S-0422 (4).

Alaska Department of Highways Materials Division. January 1968. Supplemental Materials Investigation, Dillingham-Aleknagik. Project S-0411 (4)

Alaska Department of Highways Materials Division. January 1976. Materials site report, supplement to Dillingham-Kanakanak. Project S-0411 (4)/B41022.

Alaska Department of Transportation and Public Facilities (DOT&PF). June 1980. Engineering geology and soils report, Dillingham airport supplemental materials investigation.

DOT&PF. September 1980. Engineering geology and soils report, Dillingham airport materials investigation.

DOT&PF. June 1986. Engineering geology and soils report, Dillingham airport paving materials site investigation. materials site 411-013-1. Project 53977

DOT&PF. July 1986. Engineering geology and soils report, Dillingham airport spur road materials investigation. Project 53127

DOT&PF. October 1990. Geotechnical investigation, Dillingham-Kanakanak spur road. Project 57978

DOT&PF. May 1991. Geotechnical report, general aviation expansion. Project 57978

DOT&PF. September 1997. *Geotechnical report, Dillingham-Aleknagik road rehabilitation*. Project. STP-0410 (1)/51192.

Dale, Joan, 2002. Personal Communication. Alaska State Historic and Preservation Office. Anchorage.

Lutman, T.A. January 1976. *Materials site report, supplement to Dillingham-Kanakanak, project S-0411 (4)/B41022.* Prepared for Alaska Department of Highways, Materials Division

Mertie, I.B., Jr.1938. The Nushagak District, Alaska. U.S. Geological Survey Bulletin no. 903.

Nelson, W. J. & Associates. November 1989. Soils investigation report, Dillingham airport sewer.

Selkregg, no date. Alaska Regional Profiles, Southcentral Region; by L.L. Selkregg, editor; Published by University of Alaska, Arctic Environmental Information Data Center; for State of Alaska Office of the Governor (Hammond) and the Joint Federal-State Land Use Planning Commission for Alaska.

State of Alaska Department of Highways. November 1968. *Materials reconnaissance FAS 411 to Kanakanak, mile 3.6 to 6.1.* Project S-0411 (4).

State of Alaska, Office of the Governor, Alaska Regional Profiles, Volume III, Southwest Region

Stern, Charla. 2002. Personal Communication. U.S. Fish and Wildlife Service. Threatened and Endangered Species Division. Anchorage.

U.S. Department of Agriculture Soil Conservation Service. 1965. Soils of the Dillingham Area

- USDA, 1979. Exploratory Soil Survey of Alaska, U.S. Department of Agriculture, Soil Conservation Service, February 1979, 213 pp.
- USFS, 2001. Ecological Subregions of the United States, prepared by the U.S. Forest Service. Available at http://www.fs.fed.us/land/pubs/ecoregions/ch3.html.

Vista, 2002. *Dillingham Airport, Dillingham, AK 99576*. Vista Information Solutions, Inc., Report ID 501501901. January 10, 2002, 103 pages.

Travis/Peterson Environmental Consulting, Inc has shortened this VISTA report for use in an initial environmental assessment report of the Dillingham Airport expansion proposal.

# SITE ASSESSMENT PLUS REPORT (EXTENDED BY 1 MILE)

PROPERTY INFORMATION	CUENT INFORMATION
Project Name/Ref #: 1061-09	Larry Peterson
Dillingham Airport	Travis/Peterson Environmental
Dillingham, AK 99576	329 2nd Street
Latitude/Longitude: (59.044752, 158.498979)	Fairbanks, AK 99701

	Site Dis	tribution Summary	y/āhin 1 1/8 mile	1 1/8 to 1 1/4 mile	1 1/4 to 1 1/2 mile	1 1/2 to 2 miles
Agency / Da	atabase - Typ	e of Records				
A) Database	es searched to	o 2 miles:				
US EPA	NPL	National Priority List	0	0	0	0
US EPA	CORRACTS	RCRA Corrective Actions (w/o TSD)	0	0	0	0
US EPA -	TSD CORRACTS	RCRA Corrective Actions and associated ISD	0	0	0	0
B) Database	s searched to	o 1 1/2 mile:				
STATE	SCL	State equivalent CERCLIS list	9	0	0	
US EPA	CERCLIS / NERAP	Sites currently or formerly uncler review by US EPA	0	0	0	-
US EPA	TSD	RCRA permitted treatment, storage, clisposal facilities	0	0	0	, <del>-</del>
STATE REG	LUST	Leaking Underground Storage Tanks	11	0	0	
STATE/ REG/CO	SWLF	Permitted as solid waste landfills, incinerators, or transfer stations	0	0	0	-
USGS/STATE	WATER WELLS	Federal and State Drinking Water Sources	109	1	19	
C) Database	es searched to	o 1 1/4 mile:				
US EPA	RCRA Viol	RCRA violations/enforcement actions	_ 0	0		<u> </u>
US EPA	TRIS	Toxic Release Inventory database	0	0	-	-
\$TATE	UST/AST	Registered underground or aboveground storage tanks	2	0		_



For more information call VISTA Information Solutions, Inc. at 1 - 800 - 767 - 0403.

Report ID: 501501901

Date of Report: January 10, 2002

Page #1

	Site D	Distribution Summary	v/āhin 1-1/8 mile	1 1/8 to 1 1/4 mile	1 1/4 to 1 1/2 mile	1 1/2 to 2 miles
Agency /	Database - I	Type of Records				
D) Databa	ases searche	d to 1 1/8 mile:				
U\$ EPA	ERNS	Emergency Response Notification System of spills	0	-		
US EPA	GENERAT	OR RCRA generators of hazardous wi	aste 0		-	
STATE	SPILLS	State spills list	8	<u>-</u>	-	
LIMITATION C Customer pro cannot be ar affiliated con	OF LIABILITY oceeds at its own insurer of the ac appanies, officers,	earch parameters.  I risk in choosing to rely on VISTA services, in whoke curacy of the information, errors occurring in contagents, employees and independent contractors are resulting directly or indirectly from any information.	rversion of data, or fo s cannot be held liab	e customer's le for accura	use of data. V	ISIA and i
NOTES						
_		•				
		**************************************	<del></del>			



For more information call VISTA Information Solutions, Inc. at 1 - 800 - 767 - 0403, Report ID: 501501901 Date of Report: January 10, 2002 Page #2

MapilD 4

# SITE ASSESSMENT PLUS REPORT (EXTENDED BY 1 MILE)

## **DETAILS**

VISTA BULK FUEL STORAGE FA	CHITY	VISTA ID#	66675763
Address': ON NUSHAGAK RIVER		Distance/Direction	
DILLINGHAM, AK 9957	Š	Plotted as:	Point .
CL - State Equivalent CERCLIS List / SR		EPA/Agency ID:	N/A
Agency Address:	SAME AS ABOVE		
Facility Name:	BULK FUEL STORAGE FA	CILITY	
Facility Address:	ON MUSHAGAK RIVER		
Facility ID #:	DILLINGHAM, AK 99576 1996250918001		
DEC Staff Name:	OLSON		
State Status:	NO FURTHER REMEDIAL	ACTION PLANNED	
NPL Status:	UNKNOWN		
Pollutant(s):	SEE AGENCY MEMO		
Priority Level:	NOI REPORTED NOI REPORTED MEDIUM		
Agency Memo:	HÄRT-CROWSER INVESTI MG/KG <u>AND</u> DROTO 59		ATIONS OF EAD TO 1,210
Fields Not Reported by the Source	Encitty Secondary Add	ress(1). DEC File ID #(1), Facility	Type(I), Least Agency(I)
Agency for this Site:			
tate Spills / SRC# 10	SAME AS ABOVE	EPA/Agency ID:	N/A
Agency Address:	BULK FUEL STORAGE FAC	CHIEV	
Facility, Name:	ON NUSHACAK-RIVER	₩11.17 T	
Facility Address:	DILLINGHAM, AK 99576		
Facility ID #:	1996250918001		
DEC Staff Name:	OLSON		
State Status:	NO FURTHER REMEDIAL A	ACTION PLANNED	
Priority Level:	MÉDIUM		
Agency Memo:		CONTAMINATION WERE DOCU GATION, FOUND CONCENTRA 600 PPIA,	
Material Spilled: Spill Date/Time:	NOI REPORTED NOI REPORTED		
Source Agency:	UNAVAILABLE		
Air Release:	UNKNOWN		
and Release:	UNKNOWN		
Vater Release:	UNKNOWN		
Ground Release:	UNKNOWN		
acility Release:	UNKNOWN		
Other Release:	UNKNOWN		
fields Not Reported by the Source Agency for this Site:	Facility Secondary Addi	ess(1), DEC File ID #(1)	



\* VISTA address includes enhanced city and ZIP.
For more information call VISTA Information Solutions. Inc. at 1 - 800 - 767 - 0403.

Report ID: 501501901

Date of Report: January 10, 2002 Page #17

MapilD

#### PROPERTY AND THE ADJACENT AREA (within 1 1/8 mile) CONT.

L				
VISTA	HOSPITAL	,i	VISTA ID#:	65117358
14	KANAKANAK		Distance/Direction	
1 -	DILLINGHAM, AK 99576	•	Plotted as:	Point
	quivalent CERCLIS List / SRC#	. 4	EPA/Aciency ID:	N/A
Agency Ad		HOSPITAL KANAKANAK CILLINGHAM (NEA, AK O	TEPA/AGENCY ID.	INVA
Facility Nam	ne:	HOSPITAL		
Facility Add	lress:	KANAKANAK		
		DILLINGHAM (NEA, AK		
Facility ID #:		1989250116301		
DEC File ID #	ř	DILLINGHAM		
DEC Staff Na	ime:	EVANS		· · · · · · · · · · · · · · · · · · ·
State Status:		ACIIVE		
NPL Status:		UNKNOWN		
Pollutant(s):		SEE AGENCY MEMO		
		NOI REPORIED		
		NOT REPORTED		
Priority Level		HIGH	N 4000 P850 A TIONE CLIDOTTAIN	ACCOCIATED CONT. CAL
Agency Mei	mo:	DIESEL FUEL DISCHARGING FRC NUSHAGAK BAYREPORIED 6/4. AND SIRKAM SEDWINS CONI GROUNDWAIER. PUBLIC HEAL DURAITONO'S SPILL UNKNOWN. I ACRE.	/89. SIE SUBSJRFACE SOLS AMINATED BY DESEL. THRE TH IMPACT NOT WELLDEFINE	PERCHED H2O FABLE ATENS REGIONAL D. DATE AND
Fields Not Re	eported by the Source	Facility Secondary Address (1),	Facility Type(1), Lead Agen	cy(1)
Agency for t	his Site:			
State Spills / S	RC# 10		EPA/Agency ID:	V/A
Agency Add		HOSPITAL KANAKANAK DILLINGHAM-(NEA, AK 0 HOSPITAL		
Facility Nam		KANAKANAK		
Facility Addi	ress:	DILLINGHAM (NEA, AX 1989250116301		
DEC File ID #		DILLINGHAM		
DEC Staff Na		EVANS		i
State Status:		ACIIVE		
Priority Level		HIGH		
Agency Mer	no:	DIESEL FUEL DISCHARGING FRO MUSHAGAK BAYREPORIED G/4/ AND STREAM SEDIMENIS CONI. GROUNDWATER. PUBLIC HEALI DURATIONOF SPEIL UNKNOWN. 1 ACRE. SEE AGENCY MEMO	'69, 'NIE SUBSURFACE SOLS. AMINATED BY DÆSEL. THREA I'H IMPACT NOT WELLDEFINE	PERCHED H2O TABLE NENS REGIONAL D. DAIE AND
Material Spill		NOT REPORTED		
Spill Date/Iin		NOI REPORTED		
Source Ager	эсу:	UNAVALABLE		
Air Release:		UNKNOWN		
Land Release		UNKNOWN		
Water Releas		UNKNOWN		
Ground Rele		UNKNOWN		
Facility Relea		UNKNOVN		
Other Releas	······································	UNKNOWN		
Fields Not Re Agency for t	eported by the Source his Site:	Facility Secondary Address(1)		



\* VISTA address includes enhanced city and ZIP. For more information call VISTA Information Solutions, Inc. at 1 - 800 - 767 - 0403.

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## PROPERTY AND THE ADJACENT AREA (within 1 1/8 mile) CONT.

VISTA D J ENTERPRISES	<del></del>	VISTA ID#;	64674554	Map ID
Acichess': NORTHWESTERN AUI	O WOODRIVER RD	Distance/Direction		_
DILLINGHAM, AK 99		Plotted as:	Point	<b>−</b>    5
STATE UST - State Underground Stora		Agency ID:	2358	—
Agency Address:	SAME AS ABOVE			
Facility ID #:	2358			
Facility Name:	D J ENIERPRISES			
Facility Address:	NORTHWESTERN AUTO W	COORWERRD		
	DILLINGHAM, AK 99576			
Total Underground Tanks:	2			
Total Aboveground Tanks:	NOI REPORTED			
Total Tanks Removed:	0			
Tank ID #:	1			
Regulated Tank:	YES			J
Tank Capacity (G):	500			
Tank Contents:	GASOLINE			ŀ
Tank Status:	PERMANENILY OUT OF US	SE		İ
Closure Status:	TANK CLOSED IN PLACE			ļ
Date Last Used:	1/1/83			İ
Date Closed:	1/1/83			
Date Installed:	1/1/82			
Owner ID #:	j.			
Tank ID #:	2			
Regulated Tank:	YES			
Tank Capacity (G):	500			
Tank Contents:	DIESE).			
Tank Status:	PERMANENILY OUT OF US	SE.		
Closure Status:	TANK CLOSED IN PLACE			
Date Last Used:	1/1/83			1
Date Closed:	1/1/83			
Date Installed:	1/1/82			
Owner ID #:	2			
Owner Name:	JOHN PEARSON			
Owner Address:	P.O.BOX 1169			
	DILLINGHAM, AK 88576			



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#### PROPERTY AND THE ADJACENT AREA (within 1 1/8 mile) CONJ.

		······································		<b>_</b>
VISTA COMMERCIAL AIR CAR	RRIER	VISTA ID#:	66675843	MapID
Address : AIRPORT RUNWAY R.O.	W	Distance/Direction	-	_
DILLINGHAM, AK 99576		Plottecl as:	Point'	<del>-</del>    5
SCL - State Equivalent CERCLIS List / SRC		EPA/Agency ID:	N/A	┪┕╌┈┈
Agency Address:	SAME AS ABOVE			
Facility Name:	COMMERCIAL AIR	CARRIER		
Facility Address:	AIRPORT RUNWAY	ROW		
	DILLINGHAM, AK 99576			
Facility ID #:	1993250132201			
DEC Staff Name:	FRECHIONE			
State Status:	ACTIVE			
NPL Status:	UNKNOWN			
Pollutant(s):	SEE AGENCY MEMO	o		1
,	NOT REPORTED NOT REPORTED			
Priority Level:	HICH			
Agency Memo:	SJEFERED A 2,000 C	AD A LUST, WHILE PUMPING FUEL FRO. SALLON SPILL, SNOW PLOW HIT 2' PP JRFACE, WINTER AND 1,000 GALLONS DITSREMAIN.	ELINE, DISCHARGING	
Fields Not Reported by the Source	Facility Secondary	Address(1), DEC File ID #(1), Facility Iy	rpe(I), Lend Agency(I)	
Agency for this Site:				
State Spills / SRC# 10		EPA/Agency ID:	N/A	_
Agency Address:	SAME AS ABOVE			
Facility Name:	COMMERCIAL AIR	CARRIER		
Facility Address:	AIRPORT RUNWAY I	ROW		
ConiEst 10 4.	DILLINGHAM, AK 99576 1993250132201			
Facility ID #:	FRECHIONE			ļ
DEC Staff Name: State Status:	ACTIVE			
	HGH			
Priority Level: Agency Memo: Material Spilled:	YUTE AIR ALASKA H. SUFFERED A 2,000 G		ELINE, DISCHARGING	
Spill Date/Time:	NOI REPORTED NOT REPORTED			
Source Agency:	UNAVAILABLE			
Air Release:	UNKNOWN			-
Land Release:	UNKNOWN			
Water Release:	UNKNOWN			
Ground Release:	UNKNOWN			
Facility Release:	UNKNOWN			
Other Release:	UNKNOWN			
Fields Not Reported by the Source		Address(1), DEC File ID #(1)		-
Agency for this Site:				



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HCTA INCOCAL CONTRACT		LARCEA DE M	20051007	Meg
VISTA WREN AIR INC.		VISTA ID#: Distance/Direction	66251807	—
POV QADIFFINGUAIA		Plotted as:	Point	-   5
DILLINGHAM, AK 99				
ATE UST - State Underground Stora		Agency ID:	852	_
Agency Address:	SAME AS ABOVE			
acility ID #:	852			
acility Name:	WREN AIR INC.	A (COO) OF		ļ
acility Address:	BOX-67DILLINGHAM	ARPORI		-
	DILLINGHAM, AK 98576			
otal Underground Tanks:	3			
otal Aboveground Tanks:	NOT REPORTED			
otal Tanks Removed:	2			
ank ID #:	1			
Regulated Tank:	YES			
ank Capacity (G):	1000			
ank Contents:	GASOLINE			
ank Status:	PERMANENILY OUT C	OF USE		
Closure Status:	FANK REMOVED FRO	W GROUND		
Date Last Used:	9/18/91			
Date Closed:	9/18/91			
Date Installed:	, 4/9/84			}
Owner ID #:	1			- 1
ank ID #:	2			
Regulated Tank:	YES			İ
ank Capacity (G);	1000			
ank Contents:	GASOLINE			
ank Status:	PERMANENTLY OUT C	OF USE		
Closure Status:	TANK REMOVED FRO	M GROUND		
Date Last Used:	9/18/91			
Date Closed:	. 9/18/91			İ
Date Installed:	4/9/84			
Owner ID #:	2			_
ank ID #:	3			ł
Regulated Tank:	NO			
ank Capacity (G):	1000			1
ank Contents:	HEATING OIL			
ank Status:	CURRENTLY IN USE			
Date Installed:	4/9/84			.
Owner ID #:	3			_
Owner Name:	WREN AIR, INC.			
Owner Address:	BOX 67			
	DILLINGHAM, AK 99576			



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### PROPERTY AND THE ADJACENT AREA (within 1 1/8 mile) CONT.

VISTA AIR SERVICE COMPANY		VISTA-ID.≢:	66675421
Acidress*: DILLINGHAM AIRPORT	•	Distance/Direction	
DILLINGHAM, AK 99576		Plotted as:	Point .
SCL - State Equivalent CERCLIS List / SRC	£ 4	EPA/Agency ID:	N/A
Agency Address:	SAME AS ABOVE	TEL PROPERTY IN	1777
Facility Name:	AIR SERVICE COMPANY		
Facility Address:	DILLINGHAM AIRPORT		
	DILLINGHAM, AK , 99576		
Facility ID #:	1992250133902		
DEC Staff Name:	FRECHIONE		
State Status:	ACTIVE		
NPL Status:	UNKNOWN		
Pollidant(s):	SEE AGENCY MEMO		
	NOT REPORTED NOT REPORTED		
Priority Level:	HGH		
Agency Memo:	ON DECEMBER 3, 1882, 1,200 IRUCK INSIDE HE WEST COR IL OCH DRAIN WHICH REPOR TERMINATESIN THE GRAVELT TO HAVE BEEN IMPACTED AS	NER OF THE PENNAIR HANG HEDLY CONNECTS TO AN O PAD WEST OF THE HANGAR, OF 7795.	AR. THE FUEL ENTEREDTHE IPEN ENDED PIPE THAT GROUNDWATER APPEARS
Fields Not Reported by the Source	Enailty Secondary Address()	i), DEC File ID #(1), Facility T	ype(I). Load Agency(I)
Agency for this Site:			
State Spills / SRC# 10		EPA/Agency ID:	N/A
Agency Address:	SAME AS ABOVE		
Facility Name:	AIR SERVICE COMPANY		
Facility Address:	DILLINGHAM AIRPORT		
	DILLINGHAM, AX 90576		
Facility ID #:	1992250133902		
DEC Staff Name:	FRECHIONE		
State Status:	ACIIVE		
Priority Level:	HGH		
Agency Memo:	ON DECEMBER 3, 1892, 1,260 IRUCK INSIDE THE WEST CORF ILOOR DRAIN WHICH REPORT IERMINATES IN THE GRAVEL P IO HAVE BEEN IMPACIED AS	NER OF THE PENNAIR HANG. [EDLY CONNECTS TO AN O AD WEST OF THE HANGAR.	AR. THE FUEL ENTEREDTHE PEN-ENDED PIPE THAT
Material Spilled:	SEE AGENCY MEMO NOI REPORIED		
Spill Date/Time:	NOT REPORTED		
Source Agency:	UNAVAILABLE		
Air Release:	UNKNOWN		
Land Release:	UNKNOWN		•
Water Release:	UNKNOWN		
Ground Release:	UNKNOWN		
Facility Release:	UNKNOWN		
Other Release:	UNKNOWN		
Fields Not Reported by the Source Agency for this Site:	Facility Secondary Address(1	), DEC Fåe ID ≠(1)	



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#### PROPERTY AND THE ADJACENT AREA (within 1 1/8 mile) CONT.

VISTA	ELECTRICAL GENERATION	N FACILITY	VISTA ID#:	503173051	
Acidness': DILLINGHAM, AK 99576			Distance/Direction	0.15 MI / E	
	Dicented In this, All 99970		Plotted as:	Point	
CL - State	Equivalent CERCLIS List / SRC	# <b>4</b>	EPA/Agency ID:	N/A	
Agency A	ddress:	SAME AS ABOVE	,		
Facility Na		ELECTRICAL GENERATE	ON FACILITY		
, , , , , , , , , , , , , , , , , , , ,		DILLINGHAM, AK 99576			
Facility ID	#:	1994250119601			
DEC Staff N	Name:	CLOSED  CLOSED			
State Statu	ıs:				
<b>NPL</b> Status:	:	UNKNOWN			
Pollutant(s	):	SEE AGENCY MEMO			
Priority Lev	, rol	NOT REPORTED NOT REPORTED MEDIUM			
Agency Memo:		SOMEONE DUMPED SOLVENTS INTO THE STORM DRAIN.			
Fields Not Agency to	Reported by the Source or this Site:	Facility Address(1), Fac Lead Agency(1)	illy Secondary Address(1), DEC F	le ID #(1), facility Type(1)	

S AST A	Inuitation and outly on		META IOA.	2427701	Map
VISTA	DILLINGHAM CITY SD		VISTA ID#:	3431791	
Acidress:	1 MAIN STREET		Distance/Direction		—   2 <b>:</b>
}	DILLINGHAM, AK 99576	<u> </u>	Plotted as:	Point	
STATE LUST -	State Leaking Underground St	orage Tank / SRC# 9	Agency ID:	2364	
Agency Ac		DILLINGHAM AUTO MAIN SI DILLINGHAM, AK 0 2364			
Facility ID #		DILLINGHAM AUTO			
Site Name:		MAIN SI			
Site Addres	ss:				- 1
City:		DILLINGHAM, AX			
Event ID #:		601			
Alternate E	vent ID #:	91250026203			
Site Status:		OPEN			
Media Affe	cted:	NOI REPORTED			1
Substance	Released:	NOI REPORTED			1
Discovery [	Date:	NOI REPORTED			
ADEC Staff:		BASYE			
ADEC Phon	e #:	(907) 262-5210			
Event ID #:		1743			
Alternate E	vent ID #:	9225C026203			
Site Status:		OPEN			1
Media Affe	cted:	NOT REPORTED		•	
Substance	Released:	NOT REPORTED			
Discovery D	Date:	NOI REPORIED			
ADEC Staff:		HORWAIH			
ADEC Phon		(907) 262-5210			



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#### PROPERTY AND THE ADJACENT AREA (within 1 1/8 mile) CONT.

VISTA AUTOMOBILE REPAIR SHO	)P	VISTA.ID#:	66675648
Address': DILLINGHAM		Distance/Direction	0.51 MI / E
DILLINGHAM, AK 99576		Plotted as:	Point
CL - State Equivalent CERCLIS List / SRC#	4	EPA/Agency ID:	N/A
Agency Address:	SAME AS ABOVE		
Facility Name:	AUTOMOBILE REPAIR SHOP		
Facility Address	DILLINGHAM		
·	DILLINGHAM, AX		
Facility ID #:	99576 1994250109601		
DEC Staff Name:	DB ADMINISTRATOR		
State Status:	NACIIVE		
NPL Status:	UNKNOWN		
Pollutant(s):	SEE AGENCY MEMO		
Priority Level:	NOT REPORTED NOT REPORTED MEDIUM		
Agency Memo:	GASOLINE CONTAMINATED SO	DILSDUE TO A BROKEN PIPE.	
Fields Not Reported by the Source	Facility Secondary Address(1)	DEC File ID #(1), Fncility Ty	po(1), Lead Agency(1)
Agency for this Site:			
tate Spills / SRC# 10	<u></u>	EPA/Agency ID:	N/A
Agency Address:	SAME AS ABOVE	12., ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(2477.2
•			
facility Name:	AUTOMOBILE REPAIR SHOP		
•	AUTOMOBILE REPAIR SHOP DILLINGHAM		
Facility Name: Facility Address:	DILLINGHAM DILLINGHAM, AK 99576		
Facility Address: Facility ID #:	DILLINGHAM DILLINGHAM, AK		
Facility Address: Facility ID #: DEC Staff Name;	DILLINGHAM DILLINGHAM, AK 98576 1994250 109601		
Facility Address: Facility ID #: DEC Staff Name; State Status:	DILLINGHAM DILLINGHAM, AK 98576 1884 250 109601 DB ADMINISTRATOR		
Facility Address: Facility ID #: DEC Staff Name; State Status: Priority Level:	DILLINGHAM, DILLINGHAM, AK 99576 1994250 109601 DB ADMINISTRATOR INACTIVE	DILSDUE IO A BROKEN PPE.	
Facility Address: Facility ID #: DEC Staff Name: State Status: Priority Level: Agency Memo:	DILLINGHAM DILLINGHAM, AK 99576 1994250 109601 DB ADMINISTRATOR INACTIVE MEDIUM	DILSDUE IO A BROKEN PIPE.	
Facility Address:  Facility ID #:  DEC Staff Name:  State Status:  Priority Level:  Agency Memo:  Material Spilled;	DILLINGHAM DILLINGHAM, AK 99576 1994250 (D960) DB ADMINISTRATOR INACTIVE MEDIUM GASOLINE CONTAMINATED SC	DILSDUE IO A BROKEN FIPE.	
Facility Address:  Facility ID #:  DEC Staff Name;  State Status:  Priority Level:  Agency Memo:  Material Spilled:  Spill Date/Time:	DILLINGHAM DILLINGHAM, AK 90576 1904250 100601 DB ADMINISTRATOR INACTIVE MEDIUM GASOLINE CONTAMINATED SC SEE AGENCY MEMO NOT REPORTED	DILSCUE IO A BROKEN PIPE.	
Facility Address:  Facility ID #:  DEC Staff Name: State Status:  Priority Level:  Agency Memo:  Material Spilled:  Spill Date/Time:  Source Agency:	DILLINGHAM DILLINGHAM, AK 98576 1994250 109601 DB ADMINISTRATOR INACTIVE MEDIUM GASOLINE CONTAMINATED SO SEE AGENCY MEMO NOT REPORTED NOT REPORTED	DILSCUE IO A BROKEN FIPE.	
Facility Address:  Facility ID #: DEC Staff Name: State Status: Priority Level: Agency Memo: Material Spilled: Spill Date/Time: Source Agency: Air Release:	DILLINGHAM DILLINGHAM, AK 88576 1894250 109601 DB ADMINISTRATOR INACTIVE MEDIUM GASOUNE CONTAMINATED SC SEE AGENCY MEMO NOT REPORTED UNAVAILABLE	DILSEUE IO A BROKEN FIPE.	
Facility Address: Facility ID #: DEC Staff Name: State Status: Priority Level: Agency Memo: Material Spilled: Spill Date/Time: Source Agency: Air Release: Land Release:	DILLINGHAM DILLINGHAM, AK 98576 1984250 109601 DB ADMINISTRATOR INACTIVE MEDIUM GASOLINE CONTAMINATED SC SEE AGENCY MEMO NOT REPORTED UNAVAILABLE UNKNOWN	DILSEUE IO A BROKEN FIPE.	
Facility Address:  Facility ID #: DEC Staff Name; State Status: Priority Level: Agency Memo: Material Spilled; Spill Date/Time: Source Agency: Air Release: Land Release: Water Release:	DILLINGHAM DILLINGHAM, AK 98576 1984250 109601 DB ADMINISTRATOR INACTIVE MEDIUM GASOLINE CONTAMINATED SC SEE AGENCY MEMO NOT REPORTED NOT REPORTED LINAVAILABLE UNKNOWN	DILSEUE IO A BROKEN FAPE.	
facility Address: Facility ID #: DEC Staff Name:	DILLINGHAM DILLINGHAM, AK 90576 1994250 109601 DB ADMINISTRATOR INACTIVE MEDIUM GASOLINE CONTAMINATED SC SEE AGENCY MEMO NOT REPORTED NOT REPORTED UNAVAILABLE UNKNOWN UNKNOWN	DILSCUE IO A BROKEN FAPE.	



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### PROPERTY AND THE ADJACENT AREA (within 1 1/8 mile), CONT.

VISTA UNIVERSITY		VISTA¹ID#:	66676764
Address*: 10 FROM ADMIN BLDGS		Distance/Direction	0.57 MI / E
DILLINGHAM, AK 99576		Plotted as:	Point
SCL - State Equivalent CERCLIS List / SRC#	i 4	EPA/Agency ID:	N/A
Agency Address:	SAME AS ABOVE		
Facility Name:	UNIVERSITY		
Facility Address	10 FROM ADMIN BLDGS		
Facility Secondary Address	15" FROM DAYCARE CENTER		
	DILLINGHAM, AK 88576		
Facility ID #:	1995250134001		
DEC File tD #	DILLINGHAM		
DEC Staff Name:	DS ADMINISTRATOR		
State Status:	ENACTIVE		
NPL Status:	UNKNOWN		•
Pollutant(s):	SEE AGENCY MEMO		
	NOT REPORTED		
	NOT REPORTED MEDIUM		
Priority Level:	APPROXIMATELY 375 GAILONS OF DIESEL SPILLED FROM A LOOKGALLON HEATING		
Agency Memo:	OF AST ON 12/6/95 AT 1:00  MSTALLATION CAUSED THESP WATERWELL IS 1,000. THE DRI IMPACTED SHALLOW AQUIFE	AM (SPILL #95269B34001). A W.L. A DAYGARE CENTER IST INKING WATER SOURCE AQU	RPPARENT IMPROPER 5' FROM THE SPILL.
Fields Not Reported by the Source	faciky lype(1), Lend Agency	γ(I)	
Agency for this Site:			<del>,</del>
State Spills / SRC# 10		EPA/Agency ID:	N/A
Agency Address:	SAME AS ABOVE		
Facility Name:	UNIVERSITY		
Facility Address:	10 FROM ADMIN BLDGS		
Facility Secondary Address	15" FROM DAYCARE CENTER		
I .	COULD ASSOCIATE AND		

Agency Address:	or three car whose sec
Facility Name:	UNIVERSITY
Facility Address:	10 FROM ADMIN BLDGS
Facility Secondary Address	15"FROM DAYCARE CENIER
	DILINGHAM, AK 98576
Facility ID #:	1995250134001
DEC File ID #	DHINGHAM
DEC Staff Name:	DB ADMINISTRATOR
State Status:	INACTIVE
Priority Level:	MEDIUM
Agency Memo:  Material Spilled:	APPROXIMAIELY 375 GALLONS OF DIESEL SPILLED FROM A 1,000GALLON HEALING OIL AST ON 12/6/85 AT 11:00 AM (SPILL #85269534001), APPARENT IMPROPER INSTALLATION CAUSED THESPILL. A DAYCARE CENTER ISTS FROM THE SPILL. WATERWELL IS 1,000. THE DRINKING WATER SOURCE AQUIFER IS DEEPER THAN THE IMPACTED STALLOW AQUIFER. SEE AGENCY MEMO
•	NOI REPORTED
Spill Date/Time:	NOT REPORTED
Source Agency:	UNAVAILABLE
Air Release:	UNKNOWN
Land Release:	UNKNOWN
Water Release:	UNKNOWN
Ground Release:	UNKNOWN
Facility Release:	UNKNOWN
Other Release:	UNKNOWN



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## PROPERTY AND THE ADJACENT AREA (within 1 1/8 mile) CONT.

	· · · · · · · · · · · · · · · · · · ·	<u> </u>	· · · · · · · · · · · · · · · · · · ·	
VISTA	CLINIC	<del> </del>	VISTA ID#:	66675813
Address':	WEST FIRST AVE		Distance/Direction	
	DILLINGHAM, AK 99576		Plotted as:	Point
CI State E	quivalent CERCLIS List / SRC	L A	EPA/Agency ID:	N/A
		SAME AS ABOVE	TERATAGORICY ID.	INTA
Agency Ad		CUNIC		
Facility Nar		WESI HRSI AVE		
Facility Add		AND MAIN STREETS		
гасшту зес	ondary Address	DILLINGHAM, AK 995/6		
Facility ID #	:	1985250131401		
DEC Staff N		DB ADMINISTRATOR		
State Status	**	INACIIVE		
NPL Status:		UNKNOWN		
Pollutant(s):	•	SEE AGENCY MEMO		
Priority Leve		NOI REPORTED NOI REPORTED MEDIUM		
Agency Me		APPROXIMATELY 15 C.Y. OF REMOVED ALONG WITH THE SECOND HOME HEATING O DURING INSTALLATION OF A	ON HOME HEATING CIL UST R. ISTOCKPILED CONTAMINATED E 1,000 GALLON UST BUT NO SI IL UST, 500 GALLON CAPACITA A FEED LINE FROM THE 1,000 G VEALED NO CONTAMINATION	SOL. AN ASI WAS ALSO OILS WERE IMPACIED. A (.WAS DISCOVERED ALLON USI, REMOVAL
Fields Not R Agency for	eported by the Source this Site:	DEC File ID #(1), Facility Type	e(1), Lend Agency(1)	
tate Spills /			EPA/Aciency ID:	N/A
Agency Ad		SAIVE AS ABOVE		
Facility Nan	ne:	CLINIC		
Facility Add	lress:	WEST FIRST AVE		
Facility Sec	ondary Address	AND MAIN SIREETS		
		DILLINGHAM, AK 59576		
Facility ID #		1995250131401		
DEC Staff Na	· -•	D8 ADMINISTRATOR		
State Status	•	NACHVE		
Priority Leve	d:	MEDIUM		
Agency Me Material Spi		APPROXIMATELY 15 C.Y. OF REMOVED ALONG WITH THE SECOND HOME HEATING OF DURING INSTALLATION OF A	ON HOME HEALING OIL UST RI STOCKPLED CONTAMINATED TILODO GALLON UST BUT NO S IL ÚST, 500 GALLON CAPACHY FEEDLINE FROM THE 1,000 G VEALED NO CONTAMINATION	SOL. AN ASI WAS ALSO DILS WERE IMPACIED. A (WAS DISCOVERED ALLON USI, REMOVAL
	<u> </u>	NOT REPORTED		
Spill Date/Ti	me:	NOT REPORTED		
Source Age		UNAVAILABLE		
Air Release:	•	UNKNOWN		
Land Releas	se:	UNKNOWN		
Water Relea	ise:	UNKNOWN		
Ground Rele		UNKNOWN		
Facility Rele	· ·	UNKNOWN		
Other Relea		UNKNOWN		
	eported by the Source	DEC File ID ±(1)		



\* VISTA address includes enhanced city and ZIP.
For more information call VISTA Information Solutions, Inc. at 1 - 800 - 767 - 0403.

Pager #17: 501501901

Date of Report: January 10, 2002

Pager #17

MapilD 29B

### PROPERTY AND THE ADJACENT AREA (within 1 1/8 mile) CONT.

VISTA BULK FUEL STORAGE FA	CILITY	VISTA ID#:	65118708
Acidross': 333 MAIN ST		Distance/Direction	n: 0:91 MI 7.E
DILLINGHAM, AK 99576		Plotted as:	Point
CL - State Equivalent CERCLIS List / SRC		EPA/Agency ID:	N/A
Agency Address:	SAME AS ABOVE		
Facility Name:	BULK FUEL STORAGE FACIL	JIY	
Facility Address	333 MAIN ST		
	DILLINGHAM, AK 99576		· · · · · · · · · · · · · · · · · · ·
Facility ID #:	1993250121101		
DEC Staff Name:	CLOSED		
State Status:	CLOSED		
NPL Status:	UNKNOWN		
Pollutant(s):	SEE AGENCY MEMO		
	NOI REPORIED		•
Priority Level:	NOT REPORTED UNRANKED		
· ·	NFA 1/84. CLOSED 12/94		
Agency Memo: Fields Not Reported by the Source		s(1). DEC File ID ≠(1). Facility I	vise(I). Lend Arrency(I)
Agency for this Site:	rucing seconding sectors	5; 17: DEG 1 12 115 - [17: 1 (1011)]	ypotis, codd rigologis
tate Spills / SRC# 10		EPA/Agency ID:	N/A
Agency Address:	SAME AS ABOVE	12:17:14:01:07:02	
Facility Name:	BULK FUEL STORAGE FACIL	ITY	
Facility Address:	333 MAIN SI		
	DILLINGHAM, AK		
er ren, am i	99576		
facility ID #:	1993250121101		
DEC Staff Name:	CLOSED		
State Status:	CLOSED		
Priority Level:	UNRANKED		
Agency Memo:	NFA 7/94, CLOSED 12/94.	•	
Material Spilled:	SEE AGENCY MEMO		
Spill Date /Jimes	NOI REPORTED NOI REPORTED		
Spill Date/Iime: Source Agency:	UNAVAILABLE		
Source Agency: Air Rélease:	UNKNOWN		
	UNKNOWN		
Land Release:			
Water Release:	UNKNOWN		
Ground Release:	UNKNOWN		
facility Release:	UNKNOWN		
Other Release:	UNKNOWN		
Fields Not Reported by the Source Agency for this Site:	Facility Secondary Address	s(1), DEC File ID #(1)	



\* VISTA address includes enhanced city and ZIP: For more information call VISTA Information Solutions, Inc. at 1 - 800 - 767 - 0403. Date of Report: January 10, 2002 Report ID: 501501901 Version 2.7

#### **UNMAPPED SITES**

VISTA BRISTOL EXPRESS		VISTA ID#:	4951534
Address': 431 D ST			
DILLINGHAM, AK 99576	<i>,</i>		
STATE UST - State Underground Storage		Agency ID:	2917
Agency Address:	SAME AS ABOVE	A: -1/	
Facility ID #:	2917		
facility Name:	BRISTOL EXPRESS		
Facility Address:	431 D SI		
,	DILLINGHAM, AK 89576		
Total Underground Tanks:	2		
Total Aboveground Tanks:	NOI REPORTED		
Total Tanks Removed:	0		
Tank ID #:	7		
Regulated Fank:	YES		
Tank Capacity (G):	4000		
Tank Contents:	GASOLINE		
Tank Status:	CURRENILY IN USE		
Date Installed:	9/13/93		
Owner ID #:	1		
Tank ID #:	2		
Regulated Tank:	YES		
Tank Capacity (G):	6000		
Tank Contents:	GASOLINE		
Tank Status:	CURRENILY IN USE		
Date Installed:	9/15/93		
Owner ID #:	2		
Owner Name:	ROBERI BAUMGARINER YEGA	NEHAIA	
Owner Address:	PQ 8QX 112105		
·	ANCHORAGE, AK 9951 )		
Fields Not Reported by the Source Agency for this Site:	Ciosure Status (2), Date Last Use	ed(2), Date Closed(2)	

VISTA DILLINGHAM PUBLI	C WORK\$	VISTA ID#:	503261659		
Acichess': DILLINGHAM, AK O					
IATE LUST - State Leaking Underground Storage Tank / SRC# 9		Agency ID:	2090		
Agency Address:	SAME AS ABOVE		****		
Facility ID #:	2050				
Site Name:	DILLINGHAM PUBLIC WORKS	DILLINGHAM PUBLIC WORKS			
City:	DILLINGHAM, AK	DILLINGHAM, AK			
Event ID #:	668	• • • • • • • • • • • • • • • • • • • •			
Alternate Event ID #:	82250027491				
Site Status:	OFEN				
Media Affected:	NOI REPORTED				
Substance Released:	NOI REPORTED				
Discovery Date:	NOI REPORTED	NOI REPORTED			
ADEC Staff:	BASYE	BASYE			
ADEC Phone #:	(907) 262-5210				
Fields Not Reported by the Source Agency for this Site:	Sie Address(1)		***************************************		



\* VISTA address includes enhanced city and ZIP.
For more information call VISTA Information Solutions, Inc., at 1 - 800 - 767 - 0403.
Report ID: 501501901 Date of Report: January 10, 2002

\*\*Page #17\*\*

		UNMAPPED SITES CONT.		- <u>-</u>
VISTA DILLINGHAM LANDFILL			VISTA ID#:	67016523
Address':	SE 1 4 SEC 32 T12S R55W SM DILLINGHAM, AK 0			
TATE SWLF	- Solid Waste Landfill / SRC# 5		Agency ID:	1670
Agency A	ddress:	SAME AS ABOVE	-	
Facility ID:	<del>∜</del> :	1670		
Facility Na	me:	DILLINGHAM LANDFILL		
Facility Ad	dress:	SE 14 SEC 32 T125 R55WSM		
Permit ID #	:	DILUNGHAM, AK 9921-8A002		
Facility Ca	tegory:	CLASS 2		
Facility Sta		ACTIVE		
Facility Life		NOT REPORTED		
Owner Nar		CITY OF DILLINGHAM		
Owner Cor	ntact:			
Owner Address:		PO BOX 889		
		DILLINGHAM, AK 99576-		

VISTA MARKAIR - DILLINGHAI	A STATION	VISTA ID#:	890056		
Address*: DILLINGHAM STATION					
DILLINGHAM, AK 99576	1				
TATE UST - State Underground Storage	Tank / SRC# 7	Acjency ID:	1385		
Agency Address:	SAME AS ABOVE				
Facility ID #:	1385	1385			
Facility Name:	MARKAIR DILLINGHAV	MARKAIR - DILLINGHAM STATION			
Facility Address:	DILLINGHAM STATION				
	DILLINGHAM, AK 99576				
Total Underground Tanks:	I NOT REPORTED				
Total Aboveground Tanks:					
Total Tanks Removed:	0				
Tank ID #:	7				
Regulated Tank:	NO				
Tank Capacity (G):	1000				
Tank Contents:	HEARING CII.				
Tank Status:	TEMPORARILY OUT OF USE				
Date Installed	5/8/84				
Owner ID #:	1				
Owner Name:	REEVE ALEUTIAN AIRWAYS, INC.				
Owner Address:	4700 WEST INT LAIRPORT RD				
	ANCHORAGE AK 99502				
Fields Not Reported by the Source Agency for this Site:	Closwe Status(1). Date	Last Usoci(1). Date Clasec!(1)			



\* VISTA address includes enhanced city and ZIP.
For more information call VISTA Information Solutions, Inc. at 1 - 800 - 767 - 0403.

Report ID: 501501901 Version 2.7

Date of Report: January 10, 2002 Page ± 17

	UNN	MAPPED SITES CONT.		
VISTA	ARMSTRONG AIR		VISTA ID#:	65722405
Address':	DILLINGHAM AIRPORT			
	DILLINGHAM, AK 0		<b>\</b>	
TATE LUST -	State Leaking Underground Storac	ge Tank / SRC# 9	Agency ID:	336
Agency A		ME AS ABOVE		
Facility ID		6		
Site Name:		IMSTRONG AIR		
Site Addres	SS DIL	LINGHAM AIRPORT		
City:	Dit	LINGHAM, AK		
Event ID #:	683	5		
Alternate E	vent ID #: 922	250026601		
Site Status:	OP	en		
Media Affe	cted: NO	T REPORTED	<del></del>	
Substance	Released: NO	I REPORIED		
Discovery (	Date: NO	I REPORIED		
ADEC Staff:	BUS	¥4		
ADEC Phor	ne #: (90	7) 269-7526		
VISTA	CITY OF DILLINGHAM PUBLIC	SAFFTY BUILDIN	VISTA (D#:	65722343
Acidress1:	DST			
	DILLINGHAM, AK 0			
TATE LUST -	State Leaking Underground Storag	je Tank / SRC# 9	Agency ID:	185
Agency Address:		ME AS ABOVE		
Facility ID #:		1815		
Site Name:		CHY OF DILLINGHAM PUBLIC SAFETY BUILDING		
Site Address		DSI		
City:	Dil	LINGHAM, AK		
Event ID #:	264	18		
Alternate E	vent ID #: 922	2500274 <b>06</b>		



Site Status:

ADEC Staff:

Media Affected:

Discovery Date:

ADEC Phone #:

Substance Released:

OPEN

BASYE

NOI REPORTED

NOI REPORTED

NOT REPORTED

(907) 262-5210

\* VISTA address includes enhanced city and ZIP.
For more information call VISTA Information Solutions, Inc., at 1 - 800 - 767 - 0403. Report ID: 501501901 Version 2.7 Date of Report: January 10, 2002 Page =17

	UNMAPPED SITES CONT	[*	12
VISTA C L TESORO		VISTA (D≇)	890055
Address': DILLINGHAM		}	,
DILLINGHAM, AK 99576	<b>;</b>	1	
STATE UST - State Underground Storage		Agency ID:	917
Agency Address:	SAME AS ABOVE		
Facility ID #:	917		
Facility Name:	C LIESORO		
Facility Address:	DILLINGHAM		
	DILLINGHAM, AK 99576		
Total Underground Tanks:	2		
Total Aboveground Tanks:	NOI REPORTED		
Total Tanks Removed:	0		
Tank ID #:	1		
Regulated Tank:	YES		
Tank Capacity (G):	5000		
Tank Contents:	GASOLINE		
Tank Status:	TEMPORABILY OUT OF USE		
Date Last Used	1/10/98		
Date Installed	4/30/84		
Owner ID #:	.3		
Tank ID #:	2		
Regulated Tank:	YES		
Tank Capacity (G):	5000		
Tank Contents:	GASOLINE		
Fank Status:	TEMPÖRARILY OUT OF USE		
Date Last Used	1/10/98		
Date Installed	4/30/84		
Öwner ID #:	2		
Owner Name:	CUFFORD E. TURBS		······································
Owner Address:	P.O. BOX.52		
	DILLINGHAW. AK 19576		
Fields Not Reported by the Source	Clasure Satus (2), Date Clas	æd(2)	
Agency for this Site:			

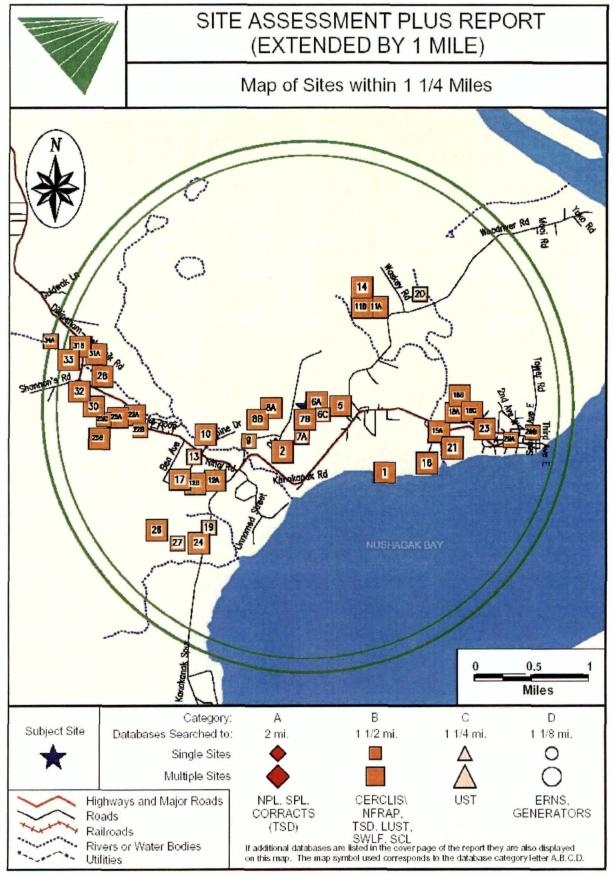


\* VISTA address includes enhanced city and ZIP.

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Report ID: \$01'\$01901 Date of Report: January 10, 2002

Version 2.7 Page #17

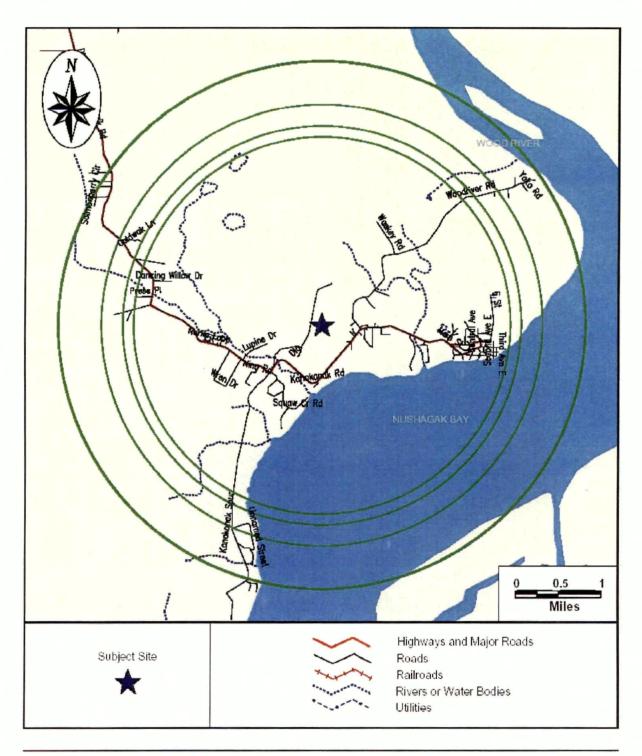


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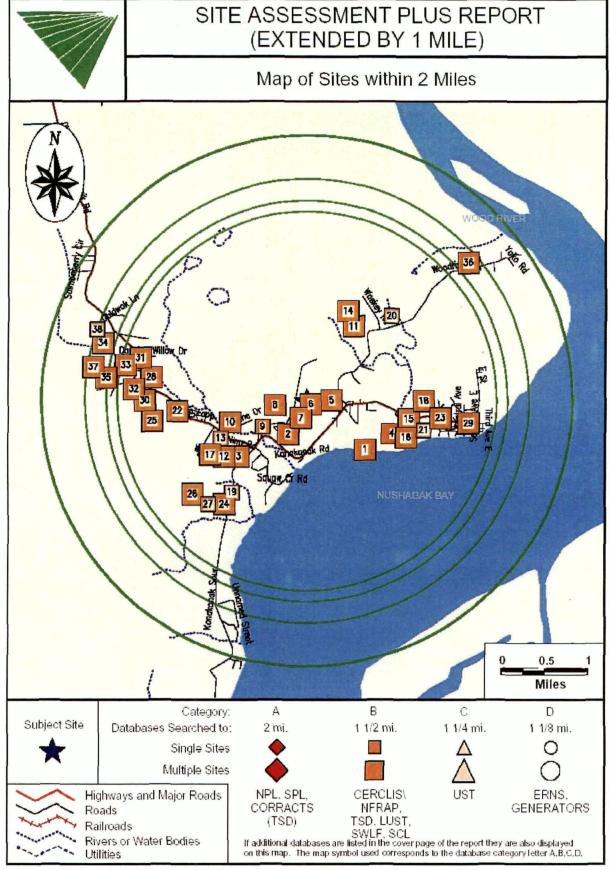
# SITE ASSESSMENT PLUS REPORT (EXTENDED BY 1 MILE)

# Street Map



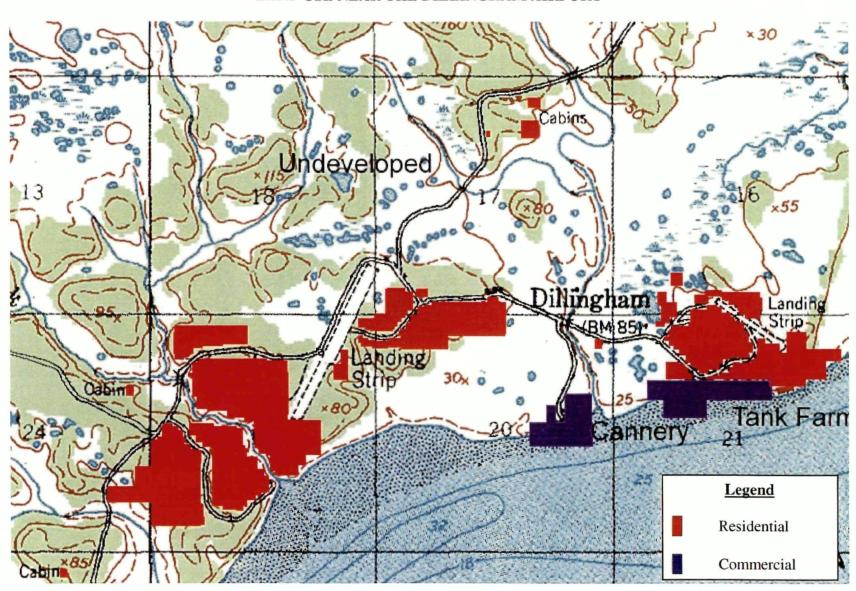
For More Information Call VISTA Information Solutions, Inc. at 1 - 800 - 767 - 0403

Report ID: 501501901 Date of Report: January 10, 2002



For More Information Call VISTA Information Solutions, Inc. at 1 - 800 - 767 - 0403
Report ID: 501501901
Date of Report: January 10, 2002

## LAND USE NEAR THE DILLINGHAM AIRPORT



FAA Integrated Noise Model 6.0c was used to model the current noise levels around the Dillingham Airport. Current operations and fleet mix were input into the model. The table below displays these inputs. The noise contours for the Dillingham airport are shown on the following page. The model predicts that no aircraft noise greater than 65 dBA is outside of airport property.

## Dillingham Daily Airport Operations - Year 2000

					C	PERATION	IS
AIRCRAFT	OPERATION	PROFILE	RUNWAY	TYPE	DAY	EVENING	NIGHT
727200	APP	STANDARD	1	COM	0.3	0	0
727200	APP	STANDARD	19	СОМ	0.2	0	0
727200	DEP	STANDARD	1	COM	0.3	0	0
727200	DEP	STANDARD	19	COM	0.2	0	0
737300	APP	STANDARD	1	COM	0.534	0	0
737300	APP	STANDARD	19	COM	0.356	0	0
737300	DEP	STANDARD	1	COM	0.534	0	0
737300	DEP	STANDARD	19	COM	0.356	0	0
C130	APP	STANDARD	1	MIL	0.57	0	0
C130	APP	STANDARD	19	MIL	0.38	0	0
C130	DEP	STANDARD	1	MIL	0.57	0	0
C130	DEP	STANDARD	19	MIL	0.38	] 0	0
CNA172	APP	STANDARD	1	GA	20.52	0	0
CNA172	APP	STANDARD	19	GA	13.68	0	0
CNA172	DEP	STANDARD	1	GA	20.52	0	0
CNA172	DEP	STANDARD	19	GA	13.68	0	0
CNA172	TNG	STANDARD		GA	26.31	0	0
CNA206	APP	STANDARD	1	GA	20.52	0	0
CNA206	APP	STANDARD	19	GA	13.68	0	0
CNA206	DEP	STANDARD	1	GA	20.52	0	0
CNA206	DEP	STANDARD	19	GA	13.68	0	0
DC6	APP	STANDARD	1	СОМ	0.348	0	0
DC6	APP	STANDARD	19	COM	0.232	0	0
DC6	DEP	STANDARD	1	СОМ	0.348	0	0
DC6	DEP	STANDARD	19	СОМ	0.232	0	0
SF340	APP	STANDARD	1	СОМ	2:082	0	0
SF340	APP	STANDARD	19	COM	1.388	0	0 .
SF340	DEP	STANDARD	1	СОМ	2.082	0	0
SF340_	DEP	STANDARD	19	COM	1.388	0	0

# APPENDIX I OBSTRUCTION DATA

# OBSTRUCTION DATA SHEET

ODS 5166
DILLINGHAM AIRPORT
DILLINGHAM, ALASKA

DIGITIZED FROM

OC 5166 SURVEYED JUNE 1991 5TH EDITION



PREPARED AND DISTRIBUTED BY
THE NATIONAL OCEAN SERVICE
U.S. DEPARTMENT OF COMMERCE
FOR THE FEDERAL AVIATION ADMINISTRATION

# ATTENTION

See SPECIAL NOTICES in "Dates of Latest Editions, Airport Obstruction Charts - Obstruction Data Sheets," for possible corrections. National Oceanic and Atmospheric Administration (NOAA) publications are available through NOAA Distribution Branch (N/CG33), National Ocean Service, Riverdale, MD 20737. Telephone: 301-436-6990

#### OBSTRUCTION DATA SHEET

The Obstruction Data Sheet (ODS) provides digital obstruction and runway data for use in aircraft arrival and departure planning. This information has been obtained using field survey and photogrammetric methods by the Photogrammetry Branch of the National Ocean Service in accordance with Federal Aviation Regulations Part 77 (FAR-77), "Objects Affecting Navigable Airspace" and FAA Nr. 405, "Specifications - Airport Obstruction Chart and Related Products."

The ODS is a derivative of the Airport Obstruction Chart (OC). The source OC is indicated on the ODS cover. All objects, both obstructing and nonobstructing, that carry an elevation on the OC are listed in the ODS. The ODS (and OC) depict a representation of objects that existed at the time of the OC field survey.

ODS information is arranged as follows:

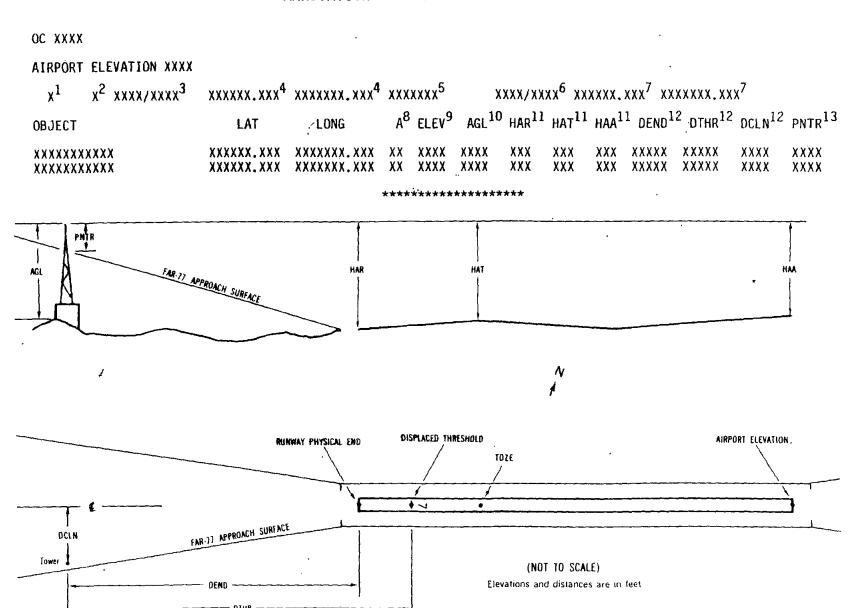
- 1. Objects located in FAR-77 approach (including supplemental approaches if present) or primary areas are listed with the associated runway (reference runway). For example, all objects in the Runway 9R approach or primary are listed with Runway 9R. Distances to these objects are computed from both the physical end and threshold of Runway 9R. Objects in the Runway 27L approach or primary are listed with Runway 27L. (Objects in the common 9R/27L primary area are listed with both runways.)
- 2. All objects not included in "1" above are listed with the Airport Reference Point (ARP).
- 3. Runway configuration and runway lengths, widths, and elevations are presented on the OBS last page.

The FAR-77 imaginary approach surfaces for which the obstruction surveys were performed are coded in the ODS as follows (see footnote 2 on page 3):

FAR-77 imaginary surface dimensions are defined on page 2 of this report.

Primary surface width is determined by the widest approach at the two approach/primary interfaces for that runway.

# ANNOTATION OF ODS DATA FORMAT



# EXPLANATION OF FOOTNOTES

- Data block identifier. If a runway number is entered (reference runway), this data block will contain data pertinent to the reference runway and to objects in the FAR-77 approach and primary area of the reference runway. If ARP is entered, this data block will contain the ARP position and data relative to all objects not in an FAR-77 approach or primary area.
- For the reference runway, the lowest FAR-77 approach surface for which an obstruction survey was performed. (More than one surface may be surveyed.)
- $^{3}$  Reference runway approach physical end elevation/touchdown zone elevation
- <sup>4</sup> Latitude and longitude of reference runway approach physical end
- $^{\rm 5}$  Reference runway geodetic azimuth reckoned clockwise from south
- <sup>6</sup> Reference runway displaced threshold elevation/touchdown zone elevation
- 7. Latitude and longitude of reference runway displaced threshold
- Mean Sea Level (MSL) elevation at top of object. This value includes 15 feet added to noninterstate roads, 17 feet added to interstate roads, and 23 feet added to railroad tracks.
- Height above ground level (AGL). AGLs are provided only for those objects appearing on the OC that are equal to, or greater than, 200 feet AGL. AGL accuracy is  $\pm 10$  feet.
- HAA Height above airport
  HAR Height above reference runway approach physical end
  HAT Height above reference runway touchdown zone elevation
- DEND Distance along reference runway centerline from point perpendicular to object to reference runway approach physical end

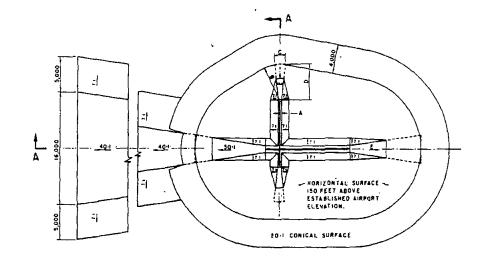
DTHR - Distance along reference runway centerline from point perpendicular to object to reference runway threshold

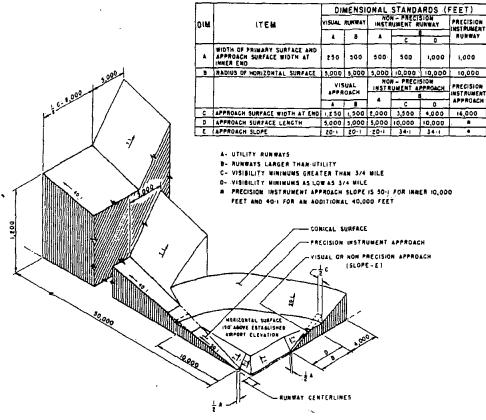
to object to reference runway threshold

DCLN - Distance left (L) or right (R) of reference runway centerline as observed facing forward in a landing aircraft.

A negative value for DEND or DTHR indicates object is in primary area on roll-out side of zero distance point.

13 PNTR - Penetration of indicated FAR-77 approach or primary surface (see footnote 2).





ISOMETRIC VIEW OF SECTION A-A

FAR-77 CIVIL AIRPORT IMAGINARY SURFACES

0C5166

AIRPORT ELEVATION 86

# 1 C 78/85 590215.275N 1583039.306W 2062927

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	AAH	DEND	DTHR	DCLN	PNTR
ROAD (N)	590255.96	1582954.85	1 <b>A</b>	89		11	4	3	-4734		239R	15
BUSH	590248.86	1583011.07	1A	87		9	2	1	-3710		199L	9
TREE	590246.10	1583004.68	1A	124		46	39	38	-360 <del>9</del>		225R	46
BUSH	590244.46	1583015.07	1A	91		13	6	5	-3217		187L	12
TREE	590240.87	1583009.35	1A	110		32	25	24	-3024		244R	30
BUSH	590240.08	1583019.79	1A	88		10	3	2	-2709		210L	7
BUSH	590235.96	1583024.59	1A	88	•	10	3	2	-2223		248L	6
WINDSOCK	590224.80	1583034.89	1A	100		22	15	14	-968		224L	20
TREE	590221.69	1583028.67	1A	103		25	18	17	-831		207R	24
TREE	590218.17	1583031.71	<b>1A</b>	113		35	28	27	-440		225R	34
BUSH	590217.70	1583041.68	lA	82		4	-3	-4	-165		221L	4
TREE	590214.24	1583034.94	1 <b>A</b>	105		27	20	19	-8		252R	27
TREE	590214.47	1583045.43	1A	90		12	5	4	216		250L	12
TREE	590211.93	1583037.00	1A	95		17	10	9	250		259R	16
DME.	590213.74	1583044.89	1A	86		8	1	0	270		192L	6
TREE	590211.36	1583038.05	1A	95		17	10	9	326		236R	13
OL ON LOCALIZER	590212.38	1583042.10	1A	81		3	-4	-5	328		0 <b>R</b>	-1

0C5166

# AIRPORT ELEVATION 86

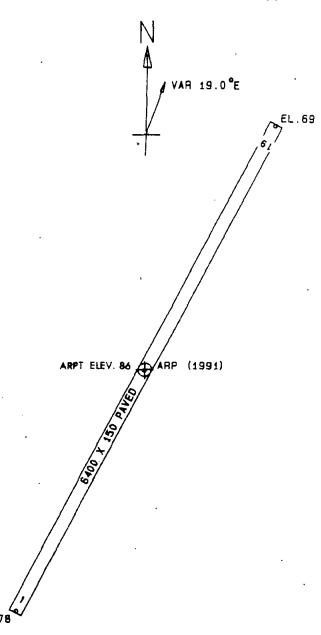
# 19 C 69/85 590311.693N 1582944.723W 0263014

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	AAH	DEND	DTHR	DCLN	PNTR
TREE	590214.47	1583045.43	1A	90		21	5	4	-6616		25 <b>0R</b>	12
TREE	590214.24	1583034.94	1 <b>A</b>	105		36	20	19	-6392		252L	27
BUSH	590217.70	1583041.68	1A	82		13	-3	-4	-6235		221R	4
TREE	590218.17	1583031.71	1A	113		44	28	27	-5959		225L	34
TREE	590221.69	1583028.67	1A	103		34	18	17	-5569		207L	24
WINDSOCK	590224.80	1583034.89	1A	100		31	15	14	~5432		224R	20
BUSH	590235.96	1583024.59	1A	88		19	3	2	-4177		248R	6
BUSH	590240.08	1583019.79	1A	88		19	3	2	-3691		210R	7
TREE	590240.87	1583009.35	1A	110		41	25	24	-3376		244L	30
BUSH	590244.46	1583015.07	1A	91		22	6	5	-3183		187R	12
TREE	590246.10	1583004.68	1A	124		55	39	38	-2791		225L	46
BUSH '	590248.86	1583011.07	1A	87		18	2	1	-2690		199R	9
ROAD (N)	590255.96	1582954.85	1A	89		20	4	3	-1666	•	239L	15
ROAD (N)	590314.22	1582942.45	1A	75		6	-10	-11	283		8R	4
BUSH	590318.63	1582930.78	1A	98		29	13	12	955		33 <b>8</b> L	7
TREE	590321.24	1582928.17	1 <b>A</b>	127		58	42	41	1254		342L	27
TREE	590326.87	1582934.78	1A	120		51	35	34	1611		222R	10
TREE	590325.25	1582926.85	1A	144		75	59	58	1649		222L	32
TREE	590328.85	1582935.20	1A	141		72	56	55	1781		332R	25
TREE	590327.74	1582918.47	1A	146		77	61	60	2071		501L	22
TREE	590335.87	1582933.74	1A	183		114	98	97	2453		582R	48
TREE	590335.44	1582927.91	1A	176		107	91	90	2550		289R	38
TREE	590333.32	1582916.33	1 <b>A</b>	165		96	80	79	2627		349L	25

0C5166

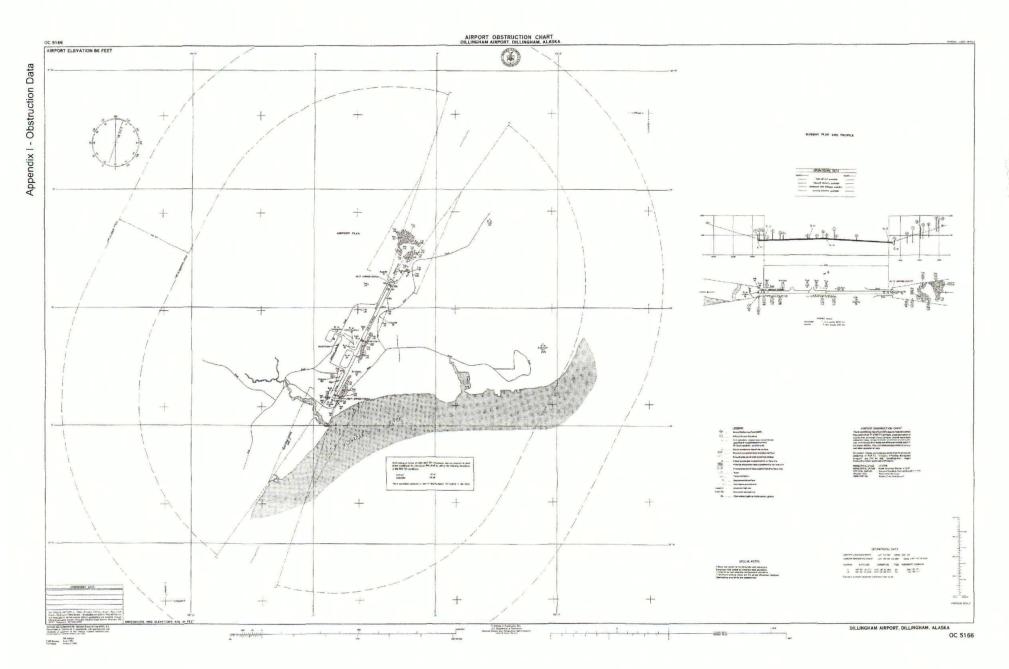
AIRPORT ELEVATION 86

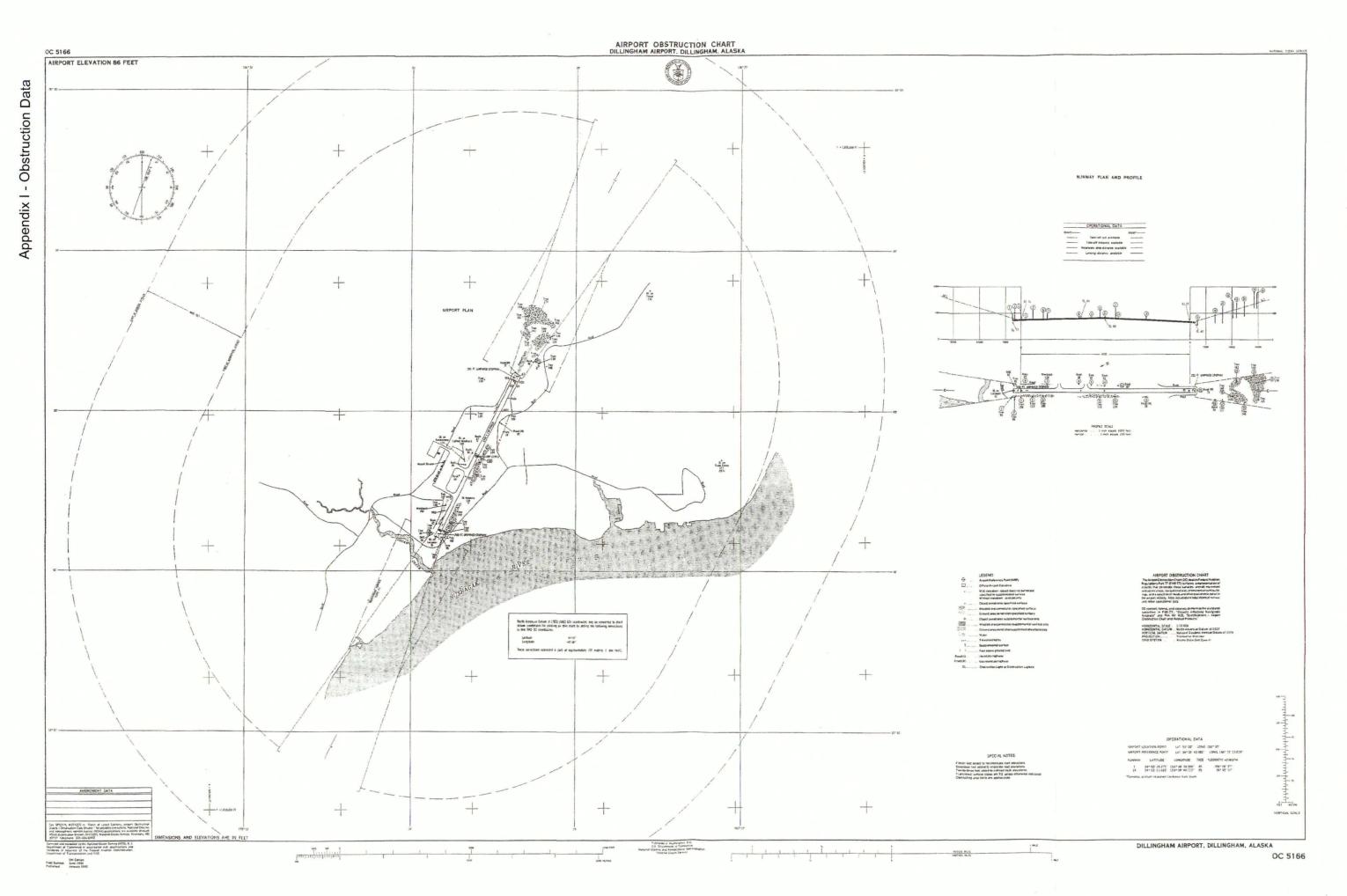
ARP	590243.485N	1583012.020W						
OBJECT	LAT	LONG	A	ELEV	AGL	наа	MAG BEARING	DISTANCE
OL ON LIGHTED WINDSOC			1A	105		19	224 7	493
OL ON ANEMOMETER	590241.92	1583021.42	1 <b>A</b>	115		29	233 6	517
TREE	590236.48	1583012.78	1 <b>A</b>	121		35	164 12	712
POLE	590252.36	1582952.46	1A	98		12	29 37	1364
TREE	590258.84	1583012.28	1A	126		40	340 30	1559
OL ANTENNA	590225.60	1583017.86	1A	131		4.5	. 170 33	1841
POLE	590258.48	1582947.97	1A	103		17	20 34	1975
POLE	590227.15	1583036.64	1A	107		21	198 50	2100
TREE	590225.19	1583039.82	1A	120		34	199 4	2359
TREE	590217.41	1583030.49	1A	117		31	181 3	2818
TREE	590311.93		1 <b>A</b>	136		50	347 2	2904
POLE	590212.30		1A	102		16	180 12	3353
TREE	590215.08		1A	118		32	192 56	3398
TREE	590318.06		1A	139		53	14 54	4229
TREE	590316.90		1A	145		59	19 9	4314
TREE	590327.19		1A	151		65	13 33	5265
TREE	590338.54		1A	189		103	358 28	5859
OL ON TOWER	590345.23		1B	235		149	27 14	9066
OL ON RADIO TOWER	590241.76		1A	417	357	331	72 3	9324
on on which rough	550221170	1005,10101	*12	71/	331	7.7.1	14 3	2344



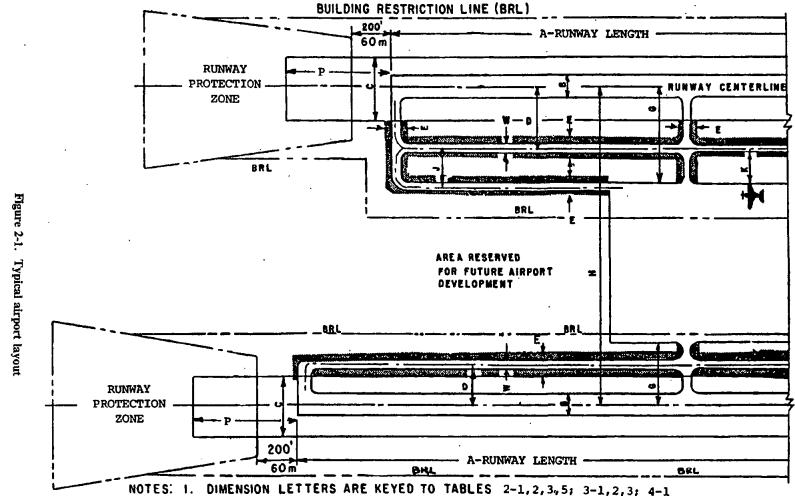
TOUCHDOWN ZONE RUNWAY ELEVATION
1 85
19 85

DILLINGHAM AIRPORT DILLINGHAM, ALASKA (NOT TO SCALE)





# APPENDIX J FAA DESIGN STANDARDS



- 2. SHADED AREA SURROUNDING TAXIWAYS DELINEATES THE LIMITS OF THE TAXIWAY SAFETY AREA.
- 3. PREFERRED LOCATION FOR BUILDING AND AIRPLANE PARKING AREA IS MIDPOINT OF RUNWAY. THE SIZE AND SHAPE ARE VARIABLE AS REQUIRED.

Chap 2

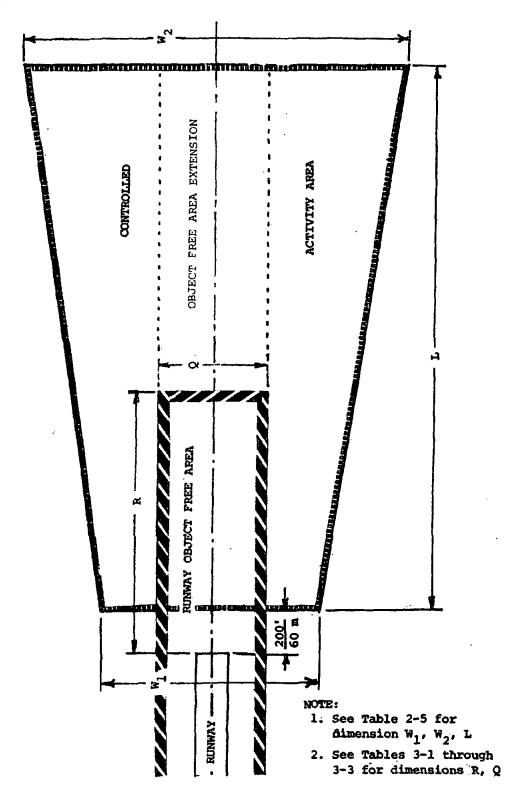
Table 2-4. Runway protection zone (RPZ) dimensions

Approach	Facilities		Dimensions					
Visibility Minimums 1/	Expected To Serve	Length L feet (meters)	Inner Width W <sub>1</sub> feet (meters)	Outer Width W2 feet (meters)	RPZ acres			
	Small Aircraft Exclusively	1,000 (300)	250 (75)	450 (135)	8.035			
Visual and Not lower than 1-Mile (1 600 m)	Aircraft Approach Categories A & B	1,000 (300)	500 (150)	700 (210)	13.770			
	Aircraft Approach Categories C & D	1,700 (510)	500 (150)	1,010 (303)	29.465			
Not lower than 3/4-Mile (1 200 m)	All Aircraft	1,700 (510)	1,000 (300)	1,510 (453)	48.978			
Lower Than 3/4-Mile ( 1200 m)	All Aircraft	2,500 (750)	1,000 (300)	1,750 (525)	78.914			

<sup>1/</sup> The RPZ dimensional standards are for the runway end with the specified approach visibility minimums. The departure RPZ dimensional standards are equal to or less than the approach RPZ dimensional standards. When a RPZ begins other than 200 feet (60 m) beyond the runway end, separate approach and departure RPZs should be provided. Refer to appendix 14 for approach and departure RPZs.

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Figure 2-3. Runway protection zone

AC 150/5300-13 CHG 7

- 310. RESCUE AND FIREFIGHTING ACCESS. Rescue and firefighting access roads are normally needed to provide unimpeded two-way access for rescue and firefighting equipment to potential accident areas. Connecting these access roads, to the extent practical, with the operational surfaces and other roads will facilitate aircraft rescue and firefighting operations.
- a. Recommendation. It is recommended that the entire runway safety area (RSA) and runway protection zone (RPZ) be accessible to rescue and firefighting vehicles so that no part of the RSA or RPZ is more than 330 feet (100 m) from either an all weather road or a paved operational surface. Where an airport is adjacent to a body of water, it is recommended that boat launch ramps with appropriate access roads be provided.
- b. All Weather Capability. Rescue and firefighting access roads are all weather roads designed

to support rescue and firefighting equipment traveling at normal response speeds. Establish the widths of the access roads on a case-by-case basis considering the type(s) of rescue and firefighting equipment available and planned at the airport. The first 300 feet (90 m) adjacent to a paved operational surface should be paved. Where an access road crosses a safety area, the safety area standards for smoothness and grading control. For other design and construction features, use local highway specifications.

c. Road Usage. Rescue and firefighting access roads are special purpose roads which supplement but do not duplicate or replace sections of a multipurpose road system. Restricting their use to rescue and firefighting access equipment precludes their being a hazard to air navigation.

311. to 399. RESERVED.

Table 3-1. Runway design standards for aircraft approach category A & B visual runways and runways with not lower than 3/4-statute mile (1 200 m) approach visibility minimums (Refer also to Appendix 16 for the establishment of new approaches)

			AIRPLA	NE DESIGN	GROUP			
ITEM	DIM'	I <sup>2</sup>	I	II	III	IV		
Runway Length	Α		- Refer to paragraph 301 -					
Runway Width	В	60 ft 18 m	60 ft 18 m	75 ft 23 m	100 ft 30 m	150 ft 45 m		
Runway Shoulder Width		10 ft 3 m	10 ft 3 m	10 ft 3 m	20 ft 6 m	25 ft 7.5 m		
Runway Blast Pad Width		80 ft 24 m	80 ft 24 m	95 ft 29 m	140 ft 42 m	200 ft 60 m		
Runway Biast Pad length		60 ft 18 m	100 ft 30 m	150 ft 45 m	200 ft 60 m	200 ft 60 m		
Runway Safety Area Width	C	120 ft 36 m	120 ft 36 m	150 ft 45 m	300 ft 180 m	500 ft 150 m		
Runway Safety Area Length Beyond RW End <sup>3</sup>	P	240 ft 72 m	240 ft 72 m	300 ft 90 m	600 ft 180 m	1,000 ft 300 m		
Obstacle Free Zone Width and length		- Refer to paragraph 306 -						
Runway Object Free Area Width	Q	250 ft 75 m	400 ft 120 m	500 ft 150 m	800 ft 240 m	800 ft 240		
Runway Object Free Area Length Beyond RW End <sup>3</sup>	R	240 ft 72 m	240 ft 72 m	300 ft 90 m	600 ft 180 m	1,000 ft 300 m		

<sup>1/</sup> Letters correspond to the dimensions on figures 2-1 and 2-3.

<sup>2/</sup> These dimensional standards pertain to facilities for small airplanes exclusively.

<sup>3/</sup> The runway safety area and runway object free area lengths begin at each runway end when stopway is not provided. When stopway is provided, these lengths begin at the stopway end. The runway safety area length and the object free area length are same for each runway end. Use the table (3-1 or 3-2) that results in the longest dimension.

10/1/02

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Table 3-2. Runway design standards for aircraft approach categories A & B runways with lower than 3/4-statute mile (1,200 m) approach visibility minimums (Refer also to Appendix 16 for the establishment of new approaches)

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ITEM	DIM		AIRPLA	NE DESIGN	GROUP	-	
I & EDIAT	Divi					IV	
Runway Length	A	- Refer to paragraph 301 -					
Runway Width	В	75 ft	100 ft	100 ft	100 ft	150 ft	
	<u> </u>	23 m	30 m	30 m	30 m	45 m	
Runway Shoulder Width		10 ft	10 ft	10 ft	20 ft	25 ft	
	l	3 m	3 m	3 m	6 m	7.5 m	
Runway Blast Pad Width		95 ft	120 ft	120 ft	140 ft	200 ft	
		29 m	36 m	36 m	42 m	60 m	
Runway Blast Pad Length		60 ft	100 ft	150 ft	200 ft	200 ft	
		18 m	30 m	45 m	60 m	60 m	
Runway Safety Area Width	C	300 ft	300 ft	300 ft	400 ft	500 ft	
	1	90 m	90 m	90 m	120 m	150 m	
Runway Safety Area	P	600 ft	600 ft	600 ft	800 ft	1,000 ft	
Length Beyond RW End <sup>3</sup>		180 m	180 m	180 m	240 m	300 m	
Obstacle Free Zone			- Refer to p	aragraph 306	-		
Width and Length	ļ						
Runway Object Free Area	Q	800 ft	800 ft	800 ft	800 ft	800 ft	
Width		240 m	240 m	240 m	240 m	240	
Runway Object Free Area	R	600 ft	600 ft	600 ft	800 ft	1,000 ft	
Length Beyond RW End <sup>3</sup>		180 m	180 m	180 m	240 m	300 m	

- 1/ Letters correspond to the dimensions on figures 2-1 and 2-3.
- 2/ These dimensional standards pertain to facilities for small airplanes exclusively.
- 3/ The runway safety area and runway object free area lengths begin at each runway end when stopway is not provided. When stopway is provided, these lengths begin at the stopway end. The runway safety area length and the object free area length are same for each runway end. Use the table (3-1 or 3-2) that results in the longest dimension

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Table 3-3. Runway design standards for aircraft approach categories C & D (Refer also to Appendix 16 for the establishment of new approaches)

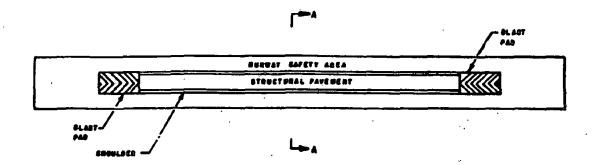
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ITEM	DIM		AIRPLANE DESIGN GROUP					
II EW	Divi	I	II	III	IV	V	VI	
Runway Length	A	- Refer to paragraph 301 -						
Runway Width	В	100 ft 30 m	100 ft 30 m	100 ft <sup>2</sup> 30 m <sup>2</sup>	150 ft 45 m	150 ft 45 m	200 ft 60 m	
Runway Shoulder Width <sup>3</sup>		10 ft 3 m	10 ft 3 m	20 ft <sup>2</sup> 6 m <sup>2</sup>	25 ft 7.5 m	35 ft 10.5 m	40 FT 12 M	
Runway Blast Pad Width		120 ft 36 m	120 ft 36 m	140 ft² 42 m²	200 ft 60 m	220 ft 66 m	280 ft 84 m	
Runway Blast Pad length		100 ft 30 m	150 ft 45 m	200 ft 60 m	200 ft 60 m	400 ft 120 m	400 ft 120 m	
Runway Safety Area Width <sup>4</sup>	С	500 ft 150 m	500 ft 150 m	500 ft 150 m	500 ft 150 m	500 ft 150-m	500 ft 150 m	
Runway Safety Area Length Beyond RW End <sup>5</sup>	Р	1,000 ft 300 m	1,000 ft 300 m	1,000 ft 300 m	1,000 ft 300 m	1,000 ft 300 m	1,000 ft 300 m	
Obstacle Free Zone Width and length			- Refe	r to paragra	ph 306 -			
Runway Object Free Area Width	Q	800 ft 240 m	800 ft 240 m	800 ft 240 m	800 ft 240 m	800 ft 240	800 ft 240	
Runway Object Free Area Length Beyond RW End <sup>5</sup>	R	1000 ft 300 m	1000 ft 300 m	1000 ft 300 m	1000 ft 300 m	1,000 ft 300 m	1000 ft 300	
Precision Object Free Area				See figure :	3/6 -			

- $\underline{1}$ / Letters correspond to the dimensions on figures 2-1 and 2-3.
- 2/ For Airplane Design Group III serving airplanes with maximum certificated takeoff weight greater than 150,000 pounds (68,100 kg), the standard runway width is 150 feet (45 m), the shoulder width is 25 feet (7.5 m), and the runway blast pad width is 200 feet (60 m).
- 3/ Design Groups V and VI normally require stabilized or paved shoulder surfaces.
- 4/ For Airport Reference Code C-I and C-II, a runway safety area width of 400 feet (120 m) is permissible.
- 5/ The runway safety area and runway object free area lengths begin at each runway end when stopway is not provided. When stopway is provided, these lengths begin at the stopway end.

11/10/94

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PLAN

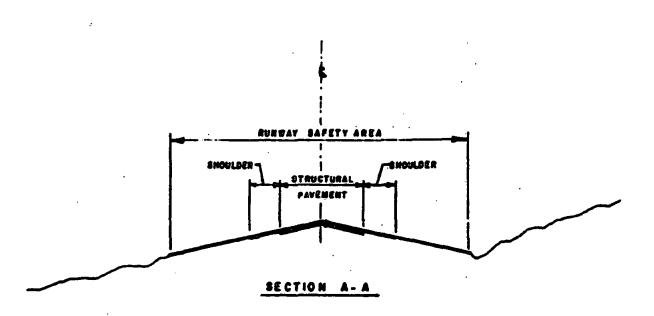
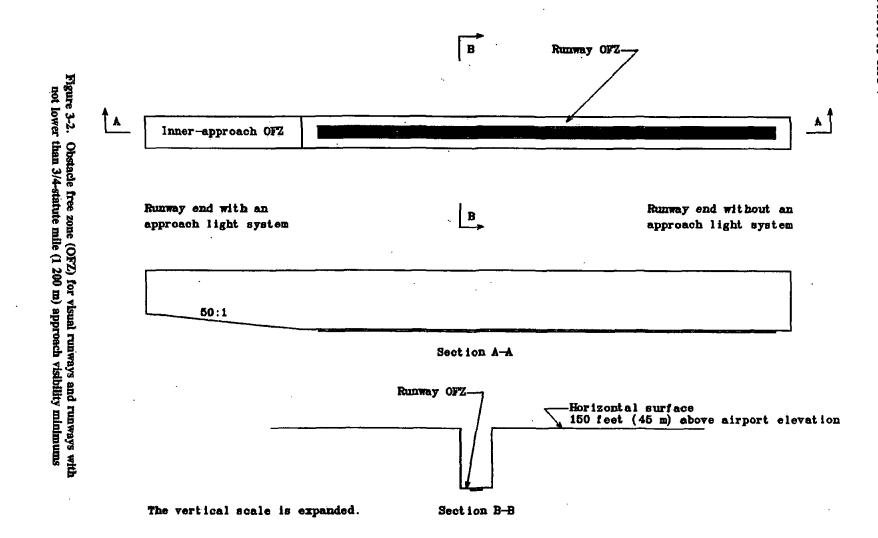
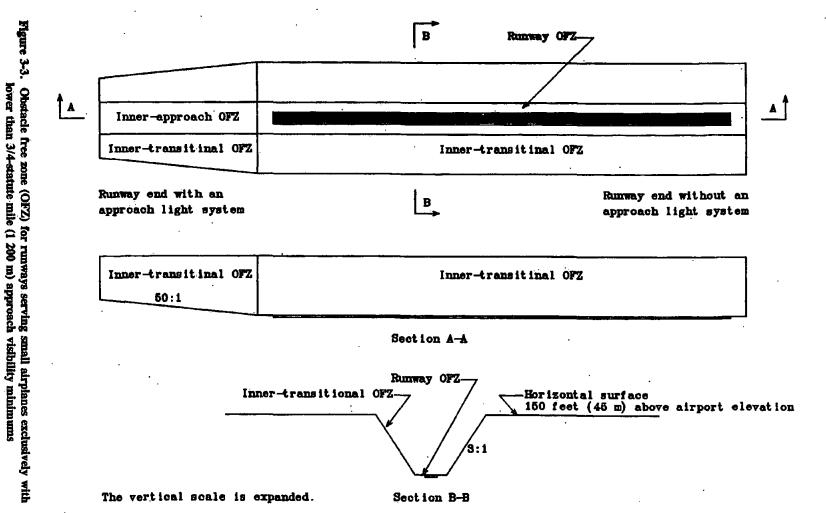


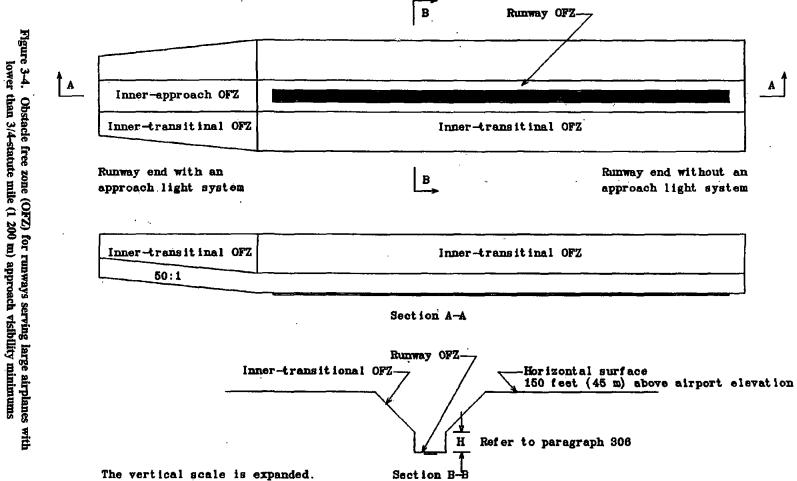
Figure 3-1. Runway safety area

Chap 3

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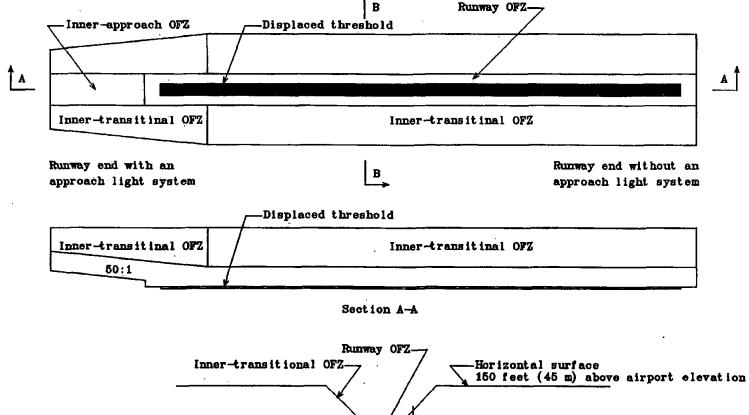




Chap 3

10

Appendix J - FAA Design Standards



Section B-B

Refer to paragraph 308

The vertical scale is expanded.

# APPENDIX K RSA PRACTICABILITY STUDY

# RUNWAY SAFETY AREA PRACTICABILITY STUDY

for the
DILLINGHAM AIRPORT
DILLINGHAM, ALASKA

AKSAS Project Number 54745

ASCG Incorporated

June 2004

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# **APPENDIX**

ALTERNATIVE A COST BLOCK SPREADSHEETS

ALTERNATIVE COST BLOCK SPREADSHEETS

ALTERNATIVE C COST BLOCK SPREADSHEETS

ALTERNATIVE C-1 COST BLOCK SPREADSHEETS

### 1.0 Purpose

The purpose of this study is to determine the practicability of constructing a standard Runway Safety Area (RSA) for the runway at the Dillingham Airport. FAA Regulations (FAR) Part 139 requires airport sponsors to provide and maintain, "to the extent practicable", a RSA in accordance with standards in Advisory Circular (AC) 150/5300-13. The FAA requires that the practicability of meeting RSA standards be determined prior to undertaking new runway improvements. The objective of this report is to determine the practicability of the planned RSA improvements for the runway and provide cost estimates for the alternatives.

# 1.1 Introduction of Existing Airport

The Dillingham Airport has one runway. Runway 1/19 has a bituminous asphalt pavement surface, two paved exit taxiways to a main aviation apron on the west side with an additional taxiway taking off from the northwest corner of this apron to a general aviation gravel apron. Runways 1 and 19 currently have approach visibility minimums of 1 statute mile. There are no material borrow sites in Dillingham and all suitable non-frost susceptible material is hauled from a borrow site approximately 13 miles away. The relatively long haul distance adds significant costs for any development at the airport and is an important consideration in which alternative is preferred.

The runway is designated as Runway 1/19 with an Approach Category C and sized for aircraft in Airplane Design Group (ADG) III. The paved runway surface is 150 feet wide and 6,404 feet long with an elevation of approximately 88 feet above Mean Sea Level (MSL). The runway safety area (RSA) is 200 feet wide and 6,893 feet long and does not meet current standards for C-III aircraft. The 201 and 288 foot safety areas beyond each runway end are not paved. The existing runway object free area is 300 feet in width and 7,604 feet long, 1,000 feet at Runway 1 and 200 feet at Runway 19, which does not meet the standard.

Runways 1 and 19 are planned to have precision approaches. The existing RSA does not meet standards for precision approaches which require 1,000 feet of safety area beyond the runway end and a width of 500 feet for Airport Reference Code C-III.

The existing and standard RSA dimensions for aircraft approach category C and airplane design group III are listed in Table 1, Existing and C-III Standard Runway Safety Area Dimensions.

ITEM	ARC C-III STANDARD	RUNWAY 1/19	MEETS STANDARD
Runway Şafety Area Width	500 Ft	200 Ft	No
Runway Safety Area Length at end of Runway 1	1,000 Ft	288 Ft	No
Runway Safety Area Length at end of Runway 19	1,000 Ft	201 Ft	No

Source: FAA AC 150/5300-13, CHG 7, Table 3-3

### TABLE 1, EXISTING and C-III STANDARD RUNWAY SAFETY AREA DIMENSIONS

#### 2.0 Future Runway and Runway Safety Area Size

The forecast for Runway 1/19 considers planning to accommodate jet aircraft up to Airport Reference Code (ARC) C-III with a paved runway width of 150 feet and runway length of 6,400 feet.

The safety area is a cleared and graded surface that is capable, under dry conditions, of supporting snow removal equipment, aircraft rescue and fire fighting equipment, and the occasional passage of aircraft without causing structural damage to the aircraft. In accordance with AC 150/5300, the recommended RSA for Airport

Reference Code (ARC) C-III is 500 feet wide and 1,000 feet beyond each runway end. The expected future RSA would be 8,400 feet long with 1,000 feet of safety area beyond each runway end. The current RSA for Runway 1/19 is 200 feet wide and 6,893 feet long. An additional 300 feet of RSA width along the entire runway and additional length beyond each end would be needed to meet the ARC C-III standard.

The RSA dimensions for aircraft approach category C and airplane design group III are listed in Table 2, Future and C-III Standard Runway Safety Area Dimensions.

ITEM	ARC C-III	PLANNED RUNWAY 1/19	MEETS STANDARD
Runway Safety Area Width	500 Ft	500 Ft	Yes
Runway Safety Area Length Beyond End of Runway	1,000 Ft	1,000 Ft	Yes

Source; FAA AC 150/5300-13, CHG 7, Table 3-3

TABLE 2. FUTURE and C-III STANDARD RUNWAY SAFETY AREA DIMENSIONS

#### 3.0 Alternatives

In the course of determining the best runway safety area at the airport, several possibilities were analyzed. These alternatives are discussed to determine which are feasible and which are not.

The first alternative to be considered in obtaining a standard runway safety area is constructing the graded embankment surrounding the runway. When land and embankment materials are available and environmental considerations allow, construction of the embankment should be the chosen alternative. If land acquisition and construction costs are high, incremental additions to the RSA can be made. Due to the availability of land and embankment materials in the vicinity, this method is considered to provide the best runway safety area at the Dillingham airport. The results are shown in the following sections.

In certain cases where the airport critical aircraft requires less runway length than is presently available, the runway length may be reduced. Reducing the length of Runway 1/19 is not a reasonable option due to the type of aircraft using the facility. Alaska Airlines currently uses Boeing 737-200 aircraft that require a 6,800 foot long runway as noted on page 10 of Technical Memorandum 2 in the Master Plan, Section 4.2.4, Runway Length. Boeing 737-400 aircraft are expected to be used at the airport in the future and will require a 6,300 foot runway length. Alaska Airlines has responded that they would oppose a reduction in runway length at the airport.

When obtaining a standard RSA is not practicable through land acquisition and construction of a graded embankment, the use of declared distances can be considered. Extending the runway safety area to the south toward Dillingham-Kanakanak Road would increase the cost significantly due to very large quantities of fill. Likewise, extending the runway more than 500 feet to the north would require excavating a large quantity of existing terrain for the Runway 19 approach slope.

If no extensions to the existing runway safety area were made, compliance could be accomplished through RSA widening and the displacement of Runway 1 threshold approximately 700 feet and the Runway 19 threshold approximately 800 feet. The resulting declared distances would be as follows:

Takeoff Run Available (TORA) – 6,400 feet. Accelerate-Stop Distance (ASDA) on Runway 1 – 5,600 feet. Accelerate-Stop Distance (ASDA) on Runway 19 – 5,700 feet. Landing Distance Available for each runway – 4,900 feet. Constructing an Engineered Materials Arresting System (EMAS) for aircraft overruns would also not be a reasonable alternative because there is land and materials available to construct safety area embankment.

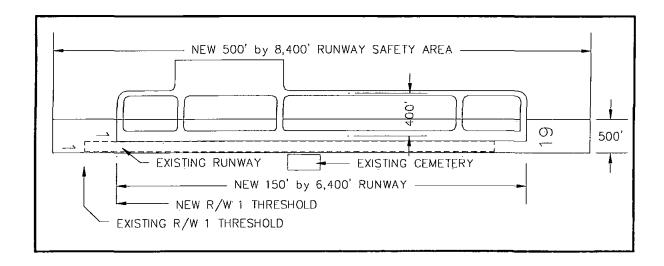
The four alternatives proposed for Runway 1/19 are discussed in the following paragraphs. For all four alternatives, a full runway safety area is planned and a parallel 50 ft wide taxiway and 118 ft wide taxiway safety area would be constructed 400 ft west from the runway. Exit taxiways would connect the runway with the parallel taxiway. In all alternatives, only the cost of constructing the RSA embankment with drainage and seeding is considered. The cost for asphalt pavement, lighting, and marking is not included.

# 3.1 Alternative A – Offset Runway 150 ft. and Relocate Threshold 500 ft North. Construct Full Length Parallel Taxiway.

This alternative would offset the runway approximately 150 feet to the west and 500 feet north from the current location. Shifting the runway to the north would allow the Dillingham-Kanakanak road to remain at its current location, however the road would cross the runway protection zone (RPZ) approximately 1,300 feet from the threshold outside the runway safety area (RSA) and the runway object free area (ROFA). Shifting the runway more than 500 feet to the north would create terrain penetrations into the Runway 19 approach surface.

Runway line of sight would be improved from the current profile to allow unobstructed visibility along half the runway length from each threshold to the midpoint of the runway. The addition of a parallel taxiway would bring line of sight into compliance with AC 150/5300-13, paragraph 503(a). The Runway 19 safety area would be extended to the north approximately 1,500 feet from the existing runway end. The Dillingham East Road around the north end of the runway would be closed and a new 24 foot wide by 4,500 foot long road would be constructed west of the parallel taxiway to provide access to the residences and a future air traffic control tower. A portion of the cemetery would be relocated out of the runway object free area. Figure 3.1 shows a plan view layout of the proposed runway safety area for this alternative. Providing this 8,400 foot RSA would require the following items of work be completed:

- Construct a 500 by 8,400 foot Runway Safety Area embankment. Clear brush and trees, excavate
  unsuitable soils to a depth of 4 feet below finish grade, place separation geotextile and place suitable
  non-frost susceptible (nfs) embankment material to grade. The safety area beyond runway ends
  would be in accordance with the standard transverse and longitudinal grades allowed in AC
  150/5300-13, paragraph 502(b). Provide drainage as required. Seed slopes and provide erosion
  control measures.
- Construct a 118 by 6,400 foot parallel taxiway safety area along the west side of the runway with five taxiway links connecting to the runway. Clear vegetation, excavate organic/weak soils, place separation geotextile, and place suitable nfs material to grade. Provide drainage as required. Seed slopes and provide erosion control measures.
- 3. Re-align Dillingham East Road. Construct a 24 foot wide by 4,500 foot long asphalt paved road around the north end of the runway safety area and west of the parallel taxiway to access the residences and air traffic control tower.
- 4. Re-align approximately 900 feet of Wood River Road outside the runway object free area.
- 5. Relocate the west 200 foot wide portion of the cemetery outside the runway object free area. See photo number 1 in Section 4.6.
- 6. Remove Runway 19 ODAL approach lights and install new MALSR approach lights.
- Runway 19 approach tree clearing and removal.



• Figure 3.1; ALTERNATIVE A - PLAN VIEW LAYOUT

## 3.2 Alternative B - Rotate Runway; Construct Full Length Parallel Taxiway.

This alternative would rotate the runway approximately 5 degrees at the threshold of Runway 1. Rotating the runway would move the runway away from the cemetery. A full length parallel taxiway would be constructed along the west side of the runway. Runway line of sight would meet the standards in accordance with AC 150/5300-13, paragraph 503.

The Dillingham-Kanakanak road would remain at its current location, but the road would be constructed within a 720 foot long steel plate tunnel with lighting and ventilation at or near the existing location and underneath the runway safety area approximately 700 feet from the threshold. Finish grade elevation of the runway safety area above the tunnel would be approximately 64 feet. Elevation of the road within the tunnel would be approximately 34 feet and the top of the tunnel would be at elevation 50 feet. An alternative to constructing a tunnel would be a 2,500 foot long new alignment outside the runway safety area at the edge of the Nushagak River. Re-alignment of the road near the river may create additional work and cost for environment studies that are not included in this study.

The Dillingham East Road around the north end of the runway would be closed and a new road would be constructed north of and around the new RSA and would cross the RPZ approximately 500 feet from the Runway 36 threshold and curve to the south outside the object free area and west of the parallel taxiway.

Runway line of sight would be in accordance with AC 150/5300-13, paragraph 503. Figure 3.2 shows a plan view layout of the proposed runway safety area for this alternative. Providing this RSA would consist of the following items of work.

- Construct a 500 by 8,400 foot Runway Safety Area embankment. Clear brush and trees, excavate
  unsuitable soils to a depth of 4 feet below finish grade, place separation geotextile and place suitable
  non-frost susceptible (nfs) embankment material to grade. The safety area beyond runway ends
  would be in accordance with the standard transverse and longitudinal grades allowed in AC
  150/5300-13, paragraph 502(b). Provide drainage as required. Seed slopes and provide erosion
  control measures.
- Construct a 118 by 6,400 foot parallel taxiway safety area along the west side of the runway with five taxiway links connecting to the runway. Clear brush and trees; excavate organic/weak soils, place separation geotextile, and place suitable nfs material to grade. Provide drainage as required. Seed slopes and provide erosion control measures.

- 3. Construct Dillingham Kanakanak road inside a 16 foot high, 38 foot wide and 720 foot long steel lined tunnel with ventilation and lighting under the Runway 18 safety area.
- 4. Re-align Dillingham East Road. Construct a 24 foot wide by 4,800 foot long asphalt paved road around the north end of the runway safety area and west of the parallel taxiway to access the residences and air traffic control tower.
- Remove ODAL approach lights on existing Runway 19 and install MALSR approach lights on new Runway 18.
- 6. Runway 18 approach tree clearing and removal.

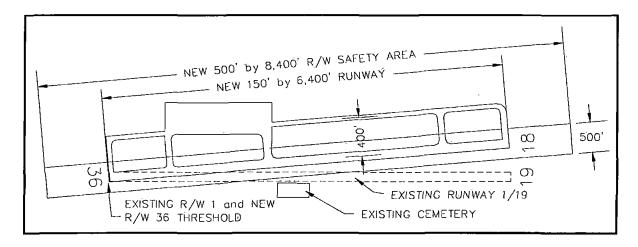


FIGURE 3.2; ALTERNATIVE B - PLAN VIEW LAYOUT

# 3.3 Alternative C—Reconstruct Runway at existing location Improve RSA, and Construct Full Length Parallel Taxiway.

This alternative would keep the runway and thresholds at their existing locations and the RSA would be widened to 500 feet and extended 1,000 feet beyond each threshold. Runway line of sight would be improved from the current profile to allow unobstructed visibility along half the runway length from each threshold to the midpoint of the runway. The addition of a parallel taxiway would bring line of sight into compliance with AC 150/5300-13, paragraph 503(a). A full length parallel taxiway would be constructed along the west side of the runway.

Wood River Road would be re-aligned for an approximate distance of 1,200 feet along the east side of the airport. The Dillingham-Kanakanak road would be re-aligned around the south end of the RSA, but would cross the RPZ approximately 1,200 feet from the threshold outside the runway safety area (RSA) and the runway object free area (ROFA). The Dillingham East Road around the north end of the runway would be moved farther to the north outside the new runway safety area and through the RPZ and then west of the parallel taxiway.

Construction of this 8,400 foot long RSA would require the purchase and removal of buildings, a fuel tank and the relocation of aboveground electric power lines from the new safety area footprint. Figure 3.3 shows a plan view layout for this alternative. Providing this RSA would require the following items of work to be completed:

Construct a 500 by 8,400 foot Runway Safety Area embankment. Clear brush and trees, excavate
unsuitable soils to a depth of 4 feet below finish grade, place separation geotextile and place suitable
non-frost susceptible (nfs) embankment material to grade. The safety area beyond runway ends
would be in accordance with the standard transverse and longitudinal grades allowed in AC

150/5300-13, paragraph 502(b). Provide drainage as required. Seed slopes and provide erosion control measures.

- 2. Construct a 118 by 6,400 foot parallel taxiway safety area along the west side of the runway with five taxiway links connecting to the runway. Clear brush and trees; excavate organic/weak soils to a depth of 4 feet below finish grade, place separation geotextile, and place suitable nfs material to grade. Provide drainage as required. Seed slopes and provide erosion control measures.
- 3. Re-align Dillingham Kanakanak road around the south end of the new RSA. The new paved road section would be approximately 2,200 feet long. See photo numbers 2 and 4 in Section 4.6.
- Re-align approximately 1,200 feet of Wood River Road outside the runway primary surface and object free area.
- Close and abandon Dillingham East Road and relocate the residence from the west side of the airport.
- 6. Purchase land and remove buildings and fuel tank, and relocate overhead electric utilities within the Runway 1 safety area footprint. See photo number 3 in Section 4.6.
- 7. Relocate the entire cemetery. See photo number 1 in Section 4.6.
- 8. Remove Runway 19 ODAL approach lights and replace with new MALSR lights. See photo number 5 in Section 4.6
- 9. Runway 19 approach tree clearing. See photo number 5 in Section 4.6.

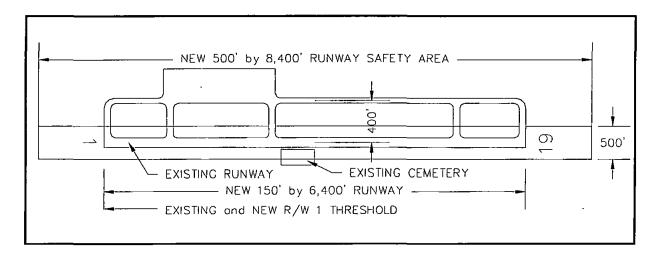


FIGURE 3.3; ALTERNATIVE C - PLAN VIEW LAYOUT

# 3.4 Alternative C-1 -- Reconstruct Runway at Existing Alignment and Move Runway North 500 feet, Improve RSA, and Construct Full Length Parallel Taxiway.

This alternative would move the runway 500 feet to the north at the existing alignment and the RSA would be widened to 500 feet and extended 1,000 feet beyond each threshold. Runway line of sight would be improved from the current profile to allow unobstructed visibility along half the runway length from each threshold to the midpoint of the runway. The addition of a parallel taxiway would bring line of sight into compliance with AC 150/5300-13, paragraph 503(a). A full length parallel taxiway would be constructed along the west side of the runway.

Wood River Road would be re-aligned for an approximate distance of 1,200 feet along the east side of the airport. The Dillingham-Kanakanak road would be re-aligned to go around the south end of the RSA for a

length of approximately 1,200 feet. The Dillingham East Road around the north end of the runway would be closed and removed.

Construction of this 8,400 foot long RSA would require relocating buildings and one fuel tank and the relocation of aboveground electric power lines from the new safety area footprint. Figure 3.4 shows a plan view layout for this alternative. Providing this RSA would require the following items of work to be completed:

- Construct a 500 by 8,400 foot Runway Safety Area embankment. Clear brush and trees, excavate
  unsuitable soils to a depth of 4 feet below finish grade and place separation geotextile and suitable
  non-frost susceptible (nfs) embankment material to grade. The safety area beyond runway ends
  would be in accordance with the standard transverse and longitudinal grades allowed in AC
  150/5300-13, paragraph 502(b). Provide drainage as required. Seed slopes and provide erosion
  control measures.
- 2. Construct a 118 by 6,400 foot parallel taxiway safety area along the west side of the runway with five taxiway links connecting to the runway. Clear vegetation, excavate organic/weak soils to a depth of 4 feet below finish grade, place separation geotextile, and place suitable nfs material to grade. Provide drainage as required. Seed slopes and provide erosion control measures.
- 3. Re-align Dillingham Kanakanak road around the south end of the new RSA. The new paved road section would be approximately 1,200 feet long. See photo numbers 2 and 4 in Section 4.6.
- 4. Re-align approximately 1,200 feet of Wood River Road outside the runway primary surface and object free area.
- Close and abandon Dillingham East Road and relocate the residence from the west side of the airport.
- 6. Purchase land and remove buildings and fuel tank, and relocate overhead electric utilities within the new Runway 1 safety area footprint. See Photo number 3 in Section 4.6.
- 7. Relocate the entire cemetery. See photo number 1 in Section 4.6.
- 8. Remove Runway 19 ODAL approach lights and control building and replace with new MALSR lights. See photo number 5 in Section 4.6.
- 9. Runway 19 approach tree clearing. See photo number 5 in Section 4.6.

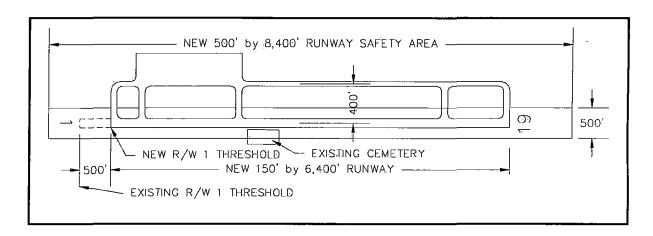


FIGURE 3.4; ALTERNATIVE C-1 - PLAN VIEW LAYOUT

### 4.0 Alternative Analysis and Cost Estimates

All four alternatives would require relocation of existing and/or installation of new approach lighting systems and associated equipment. The cost for these navigation systems is assumed to be equal for all alternatives. This analysis includes costs to construct and prepare the Runway Safety Area embankment and not the entire runway surface.

Unit costs for items of work are estimated as follows:

- a. Unclassified Excavation at \$7.00 per cubic yard.
- b. Borrow Embankment at \$17.00 per cubic yard.
- c. Base Course at \$27.00 per cubic yard.
- d. Asphalt Pavement for roads at \$50.00 per ton.
- e. Seeding at \$4,000 per acre.
- f. Clearing at \$4,700 per acre.

RSA alternative costs are for the runway safety area embankment, taxiway embankment, clearing, drainage, geotextile, road re-alignments and seeding. The RSA cost estimate does not include the cost for asphalt pavement or base courses, pavement grooving, edge lighting systems, markings and signs, environmental mitigation issues, or other miscellaneous items. Spreadsheets for each of the four alternatives showing incremental costs for blocks of embankment are shown on the attachments at the end of this section. Total airport reconstruction costs are shown in the Master Plan report.

#### 4.1 Alternative A, Offset Runway 150 ft. and Relocate Threshold 500 ft North. Construct Full Length Parallel Taxiway.

Completion of this alternative is estimated to cost \$16,490,000 as shown in Table 4.1. Costs do not include administration, construction management and environmental studies.

ITEM	ESTIMATED COST
Offset Runway, Reconstruct RSA, Geotextile, Seeding, Drainage and Erosion Control.	\$ 11,660,000
Construct Parallel Taxiway and Taxiway Links Embankment	\$ 3,325,000
Re-align Dillingham East Road	\$600,000
Re-Align Wood River Road	\$ 220,000
Re-locate portion of cemetery	\$ 250,000
Approach lights and Nav-aids	\$-435,000
TOTAL ESTIMATED COST	\$16,490,000

TABLE 4.1; ALTERNATIVE A RSA ESTIMATED COST

#### 4.2 Alternative B. Rotate Runway; Construct Full Length Parallel Taxiway.

Completion of this alternative is estimated at \$25,067,000 as shown in Table 4.2. Costs do not include administration, construction management and environmental studies.

ITEM	ESTIMATED COST
Re-align Runway, Construct RSA, Geotextile, Seeding, Drainage, Erosion Control.	\$17,117,000
Construct Parallel Taxiway and Taxiway Links Embankment	\$5,440,000
Dillingham-Kanakanak Road with Ventilated Tunnel and Lights **	\$1,250,000 **
Re-align Dillingham East Road	\$ 825,000
Approach lights and Nav-aids	\$ 435,000
TOTAL ESTIMATED COST	\$25,067,000

### TABLE 4.2; ALTERNATIVE B RSA ESTIMATED COST

# 4.3 Alternative C, Reconstruct Runway at Existing Location, Construct full 500' by 8,400' RSA, and Construct Full Length Parallel Taxiway.

Completion of this alternative is estimated at \$24,055,000 as shown in Table 4.3. Costs do not include administration, construction management and environmental studies.

ITEM	ESTIMATED COST
R/W Safety Area Excavation and Embankment, Geotextile, Seed, Drainage, Erosion Control.	\$17,200,000
Construct Parallel Taxiway and Taxiway Links Embankment	\$3,500,000
Re-align Dillingham Kanakanak Road	\$750,000
Re-align Wood River Road	\$ 220,000
Relocate Cemetery	\$750,000
Purchase and Remove Residences	\$ 1,200,000
Approach lights and Nav-aids	\$ 435,000
TOTAL ESTIMATED COST	\$24,055,000

#### ALTERNATIVE C RSA ESTIMATED COST

<sup>\*\*</sup> An alternative to constructing the tunnel under the runway safety area is to re-align Dillingham Kanakanak road around the end of the runway safety area. The estimated cost to construct the road outside the safety area is \$ 1,700,000.

### 4.4 Alternative C-1 – Reconstruct Runway at Existing Alignment and Move Runway North 500 feet, Improve RSA, and Construct Full Length Parallel Taxiway.

Completion of this alternative is estimated at \$19,730,000 as shown in Table 4.4. Costs do not include administration, construction management and environmental studies.

ITEM	ESTIMATED COST
R/W Safety Area Excavation and Embankment, Geotextile, Seed, Drainage, Erosion Control.	\$13,150,000
Construct Parallel Taxiway and Taxiway Links Embankment	\$3,500,000
Re-align Dillingham-Kanakanak Road	\$475,000
Re-align Wood River Road	\$ 220,000
Relocate Cemetery	\$750,000
Purchase and Remove Residences and Relocate Overhead Electric Power	\$ 1,200,000
Approach lights and Nav-aids	\$ 435,000
TOTAL ESTIMATED COST	\$19,730,000

TABLE 4.4; ALTERNATIVE C-1 RSA ESTIMATED COST

#### 4.5 Alternative Summary

Alternative A has the lowest cost based on this study. A couple of factors are responsible for Alternative A having the lower cost. The primary reason is due to the larger volume of material within the existing runway embankment that will subsequently be used to construct the new RSA embankment and a lower quantity of material obtained from a borrow site. Assuming a cost of \$7.00 for excavated material compared to a cost of \$17.00 for material obtained from a borrow site located 13 miles from the airport, the cost for embankment construction is the primary factor in obtaining the lowest cost. In addition, selecting Alternative A would not require the purchase and relocation of buildings, a fuel tank and overhead electric power lines or the realignment of the Dillingham-Kanakanak Road, both of which add up to approximately two million dollars. See Table 4.5 for a cost summary showing all four alternatives.

Construction of Alternative A could be completed by dividing the project into two stages left and right of the new runway centerline and constructing the new portion while maintaining use of the existing runway for aircraft operations during construction. Upon completion of the new portion, the existing runway would be graded to match.

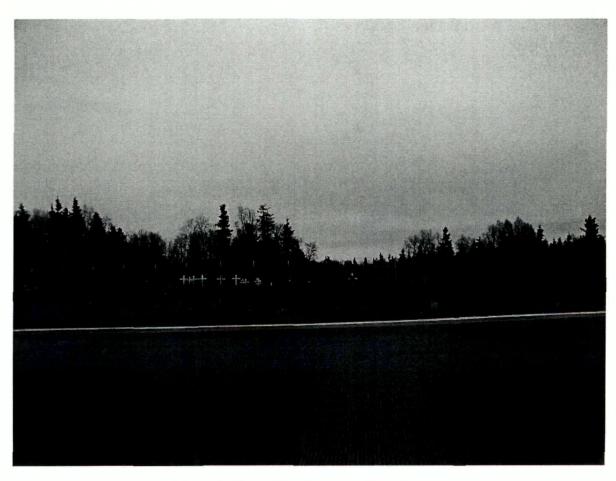
ITEM	ALT A	ALT B	ALT C	ALT C-1
RW Safety Area Excavation and Embankment, Geotextile, Seed, Drainage, Erosion Control.	\$ 11,660,000	\$17,117,000	\$17,200,000	\$13,150,000
Construct Parallel Taxiway and Taxiway Links Embankment	\$ 3,325,000	\$5,440,000	\$3,500,000	\$3,500,000
Re-align Dillingham-Kanakanak Road		\$1,250,000	\$750,000	\$475,000
Re-align Dillingham East Rd	\$ 600,000	\$825,000		
Re-align Wood River Road	\$ 220,000		\$ 220,000	\$ 220,000
Relocate Cemetery	\$250,000		\$750,000	\$750,000
Purchase and Remove Residences, Fuel Tank and Relocate Power lines			\$ 1,200,000	\$ 1,200,000
Approach lights and Nav-aids	\$ 435,000	\$435,000	\$ 435,000	\$ 435,000
TOTAL ESTIMATED COST	\$16,490,000	\$25,067,000	\$24,055,000	\$19,730,000

#### **TABLE 4.5; ALTERNATIVE COMPARISONS**

#### 4.6 Photographs

Photographs on the following pages show existing conditions around the airport.

- Photo 1 View of the cemetery from the runway.
- Photo 2 Terrain dropping off beyond the end of Runway 01 with Nushagak River in the near distance.
- Photo 3 View of buildings and fuel tank beyond the end of Runway 01.
- Photo 4 View of terrain off the end of Runway 01 that would require a large quantity of fill for RSA extension.
- Photo 5 View of terrain beyond the end of Runway 19.
- Photo 6 View of the apron looking southward.



• Photo 1: View of the Cemetery from Runway

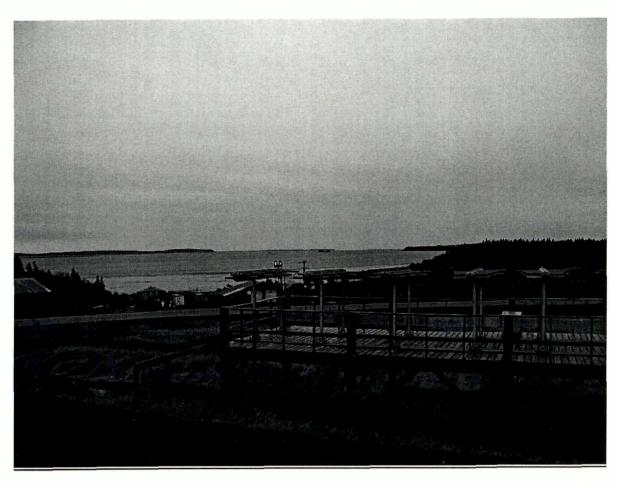
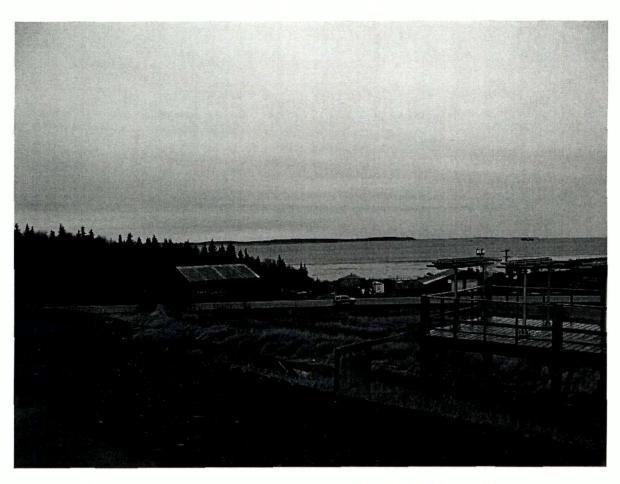


Photo 2: View of area beyond Runway 01 and Nushagak River



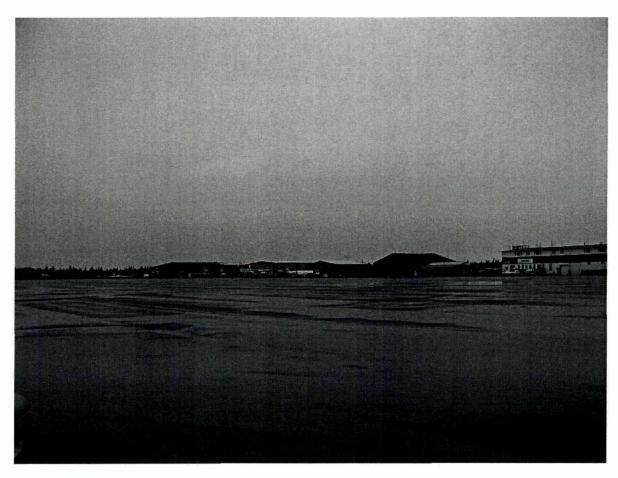
• Photo 3: View of Buildings and Fuel Tank near Runway 01



• Photo 4: View of Terrain Dropping off end of Runway 01 from Dillingham-Kanakanak Road



• Photo 5: View of terrain beyond end of Runway 19



• Photo 6: View of Apron Looking Southward

**APPENDIX** 

## ALTERNATIVE A

					ANCE FROM I							
	250	200	150	100	75	75	100	150	200	250		
1,000	\$18,054	\$18,054	\$18,054	\$9,027	\$27,081	\$27,081	\$9,027	\$22,037	6,524	6,524		\$161,463
900	\$18,054	\$18,054	\$18,054	\$9,027	\$27,081	\$27,081	\$9,027	\$22,037	6,524	6,524		\$161,463
800	\$18,870	\$18,870	\$18,870	\$9,435	\$28,305	\$28,305	\$9,435	\$18,870	\$18,870	\$18,870		\$188,700
700	\$18,870	\$18,870	\$18,870	\$9,435	\$28,305	\$28,305	\$9,435	\$18,870	\$18,870	\$18,870		\$188,700
600	\$18,564	\$18,564	\$18,564	\$9,282	\$27,846	\$27,846	\$9,282	\$18,564	\$18,564	\$18,564		\$185,640
500 400	\$18,564 \$18,802	\$18,564 \$18,802	\$18,564 \$18,802	\$9,282 \$9,401	\$27,846 \$28,203	\$27,846 \$28,203	\$9,282 \$9,401	\$18,564 \$18,802	\$18,564 \$18,802	\$18,564 \$18,802	N.	\$185,640 \$188,020
300	\$18,802	\$18,802	\$18,802	\$9,401	\$28,203	\$28,203	\$9,401	\$18,802	\$18,802	\$18,802	N	\$188,020
200	\$19,380	\$19,380	\$19,380	\$9,690	\$58,140	\$58,140	\$9,690	\$19,380	\$19,380	\$19,380	E	\$251,940
100	\$19,380	\$19,380	\$19,380	\$9,690	1		\$9,690	\$19,380	\$19,380	\$19,380	W	\$135,660
6,400	\$113,934	\$113,934	\$113,934	\$56,967	\$170,901	\$170,901	\$658	\$1,316	\$1,316	\$1,316	R	\$745,177
6,000	\$93,534	\$93,534	\$93,534	\$46,767	\$140,301	\$140,301	\$12,614	\$25,228	\$25,228	\$25,228	U	\$696,269
5,500	\$95,778	\$95,778	\$95,778	\$47,889	\$143,667	\$143,667	\$19,565	\$39,130	\$39,130	\$39,130	N	\$759,512
5,000	\$95,574	\$95,574	\$95,574	\$47,787	\$143,361	\$143,361	\$20,713	\$41,426	\$41,426	\$41,426	W	\$766,222
4,500	\$100,402	\$100,402	\$100,402	\$50,201	\$150,586	\$150,586	\$18,648	\$37,296	\$37,296	\$37,296	Α	\$783,115
4,000	\$131,002	\$131,002	\$131,002	\$65,501	\$196,503	\$196,503	\$18,606	\$37,212	\$37,212	\$37,212	Υ	\$981,755
3,500	\$78,302	\$78,302	\$78,302	\$39,151	\$117,453	\$117,453	\$25,179	\$50,358	\$50,358	\$50,358		\$685,216
3,000	\$73,836	\$73,836	\$73,836	\$36,918	\$15,538	\$15,538	\$36,918	\$73,836	\$73,836	\$73,836	S	\$547,928
2,500	\$74,830	\$74,830	\$74,830	\$37,415	\$1,989	\$1,989	\$37,415	\$74,830	\$74,830	\$74,830	A	\$527,788
2,000	\$40,194	\$40,194	\$40,194	\$20,097	\$29,070	\$29,070	\$20,097	\$40,194	\$40,194	\$40,194	F	\$339,498
1,500	\$25,866	\$25,866	\$25,866	\$12,933	\$37,672	\$37,672	\$12,933	\$25,866	\$25,866	\$25,866	E	\$256,409
1,000	\$23,934	\$23,934	\$23,934	\$11,967	\$85,170	\$85,170	\$11,967	\$23,934	\$23,934	\$23,934	Т	\$337,881
500	\$20,381	\$20,381	\$20,381	\$10,191	\$45,458	\$45,458	\$10,191	\$20,381	\$20,381	\$20,381	Y	\$233,584
100	\$5,758	\$5,758	\$5,758	\$2,879	0	1	\$2,879	\$5,758	\$5,758	\$5,758		\$40,307
200	\$5,758	\$5,758	\$5,758	\$2,879	\$12,648	\$12,648	\$2,879	\$5,758	\$5,758	\$5,758	Α	\$65,603
300	\$9,884	\$9,884	\$9,884	\$4,942	\$5,131	\$5,131	\$4,942	\$9,884	\$9,884	\$9,884	R	\$79,449
400	\$9,884	\$9,884	\$9,884	\$4,942	\$5,131	\$5,131	\$4,942	\$9,884	\$9,884	\$9,884	E	\$79,449
500	\$1,768	\$1,768	\$1,768	\$884	\$2,652	\$2,652	\$12,523	\$25,046	\$25,046	\$25,046	Α	\$99,153
600	\$1,768	\$1,768	\$1,768	\$884	\$2,652	\$2,652	\$12,523	\$25,046	\$25,046	\$25,046		\$99,153
700	\$4,284	\$4,284	\$4,284	\$2,142	\$6,426	\$6,426	\$10,493	\$20,986	\$20,986	\$20,986		\$101,297
800	\$4,284	\$4,284	\$4,284	\$2,142	\$6,426	\$6,426	\$10,493	\$20,986	\$20,986	\$20,986		\$101,297
900	\$67,456	\$67,456	\$67,456	\$33,728	\$101,184	\$101,184	\$4,536	\$9,072	\$9,072	\$9,072		\$470,216
1,000	\$67,456	\$67,456	\$67,456	\$33,728	\$101,184	\$101,184	\$4,536	\$9,072	\$9,072	\$9,072		\$470,216
SUMS	\$1,333,208	\$1,333,208	\$1,333,208	\$666,604	\$1,802,112	\$1,802,112	\$409,920	\$827,806	\$796,780	\$796,780		

## ALTERNATIVE B

				DISTA	ANCE FROM	R/W CENTER	LINE					
	250	200	150	100	75	75	100	150	200	250		
1,000	\$17,544	\$17,544	\$17,544	\$8,772	\$26,316	\$26,316	\$8,772	\$17,544	\$17,544	\$17,544		\$175,440
900	\$17,544	\$17,544	\$17,544	\$8,772	\$26,316	\$26,316	\$8,772	\$17,544	\$17,544	\$17,544		\$175,440
800	\$17,646	\$17,646	\$17,646	\$8,823	\$26,469	\$26,469	\$8,823	\$17,646	\$17,646	\$17,646		\$176,460
700	\$17,646	\$17,646	\$17,646	\$8,823	\$26,469	\$26,469	\$8,823	\$17,646	\$17,646	\$17,646		\$176,460
600	\$17,544	\$17,544	\$17,544	\$8,772	\$26,316	\$26,316	\$8,772	\$17,544	\$17,544	\$17,544		\$175,440
500	\$17,544	\$17,544	\$17,544	\$8,772	\$26,316	\$26,316	\$8,772	\$17,544	\$17,544	\$17,544		\$175,440
400	\$17,000	\$17,000	\$17,000	\$8,500	\$25,500	\$25,500	\$8,500	\$17,000	\$17,000	\$17,000	N	\$170,000
300 200	\$17,000 \$17,646	\$17,000 \$17,646	\$17,000 \$17,646	\$8,500 \$8,823	\$25,500 \$52,938	\$25,500 \$52,938	\$8,500 \$8,823	\$17,000 \$17,646	\$17,000 \$17,646	\$17,000 \$17,646	E	\$170,000 \$229,398
100	\$17,646	\$17,646	\$17,646	\$8,823	\$52,936		\$8,823	\$17,646	\$17,646	\$17,646	W	\$123,522
		-										
6,400	\$71,205	\$71,205	\$71,205	\$35,603	\$106,808	\$106,808	\$35,603	\$71,205	\$71,205	\$71,205	R	\$712,050
6,000	\$85,405	\$85,405	\$85,405	\$42,703	\$128,108	\$128,108	\$42,703	\$85,405	\$85,405	\$85,405	U	\$854,050
5,500	\$104,713	\$104,713	\$104,713	\$52,356	\$157,069	\$157,069	\$52,356	\$104,713	\$104,713	\$104,713	N	\$1,047,125
5,000	\$96,505	\$96,505	\$96,505	\$48,253	\$144,758	\$144,758	\$48,253	\$96,505	\$96,505	\$96,505	W	\$965,050
4,500	\$151,895	\$151,895	\$151,895	\$75,948	\$227,843	\$227,843	\$75,948	\$151,895	\$151,895	\$151,895	Α	\$1,518,950
4,000	\$94,915	\$94,915	\$94,915	\$47,458	\$142,373	\$142,373	\$47,458	\$94,915	\$94,915	\$94,915	Υ	\$949,150
3,500	\$50,720	\$50,720	\$50,720	\$25,360	\$76,080	\$76,080	\$25,360	\$50,720	\$50,720	\$50,720		\$507,200
3,000	\$39,085	\$39,085	\$39,085	\$19,543	\$58,628	\$58,628	\$19,543	\$39,085	\$39,085	\$39,085	S	\$390,850
2,500	\$33,958	\$33,958	\$33,958	\$16,979	\$50,936	\$50,936	\$16,979	\$33,958	\$33,958	\$33,958	Α	\$339,575
2,000	\$30,550	\$30,550	\$30,550	\$15,275	\$45,825	\$45,825	\$15,275	\$30,550	\$30,550	\$30,550	F	\$305,500 \$326,450 \$319,225
1,500	\$32,645	\$32,645	\$32,645	\$16,323	\$48,968	\$48,968	\$16,323	\$32,645	\$32,645	\$32,645	E	\$326,450
1,000	\$31,923	\$31,923	\$31,923	\$15,961	\$47,884	\$47,884	\$15,961	\$31,923	\$31,923	\$31,923	Т	\$319,225
500	\$35,000	\$35,000	\$35,000	\$17,500	\$52,500	\$52,500	\$17,500	\$35,000	\$35,000	\$35,000	Υ	\$350,000
100	\$20,587	\$20,587	\$20,587	\$6,797	0	1	\$6,797	\$20,587	\$20,587	\$20,587		\$137,116
200	\$20,587	\$20,587	\$20,587	\$6,797	\$40,782	\$40,782	\$6,797	\$20,587	\$20,587	\$20,587	A	\$218,680
300	\$56,270	\$56,270	\$56,270	\$3,675	\$11,025	\$11,025	\$3,675	\$56,270	\$56,270	\$56,270	R	\$367,020
400	\$56,270	\$56,270	\$56,270	\$3,675	\$11,025	\$11,025	\$3,675	\$56,270	\$56,270	\$56,270	E	\$367,020
500	\$65,144	\$65,144	\$65,144	\$32,572	\$97,716	\$97,716	\$32,572	\$65,144	\$65,144	\$65,144	Α	\$651,440
600	\$65,144	\$65,144	\$65,144	\$32,572	\$97,716	\$97,716	\$32,572	\$65,144	\$65,144	\$65,144		\$651,440
700	\$84,796	\$84,796	\$84,796	\$42,398	\$127,194	\$127,194	\$42,398	\$84,796	\$84,796	\$84,796		\$847,960
800	\$84,796	\$84,796	\$84,796	\$42,398	\$127,194	\$127,194	\$42,398	\$84,796	\$84,796	\$84,796		\$847,960
900	\$127,534	\$127,534	\$127,534	\$63,767	\$191,301	\$191,301	\$63,767	\$127,534	\$127,534	\$127,534		\$1,275,340
1,000	\$127,534	\$127,534	\$127,534	\$63,767	\$191,301	\$191,301	\$63,767	\$127,534	\$127,534	\$127,534		\$1,275,340
SUMS	\$1,741,940			\$815,057	\$2,445,170	\$2,445,170	\$815,057	\$1,741,940	\$1,741,940	\$1,741,940		

## ALTERNATIVE C

				DISTA	ANCE FROM	R/W CENTER	RLINE					
	250	200	150		75	75	100	150	200	250		
1,000	\$22,260	\$22,260	\$22,260	\$29,257	\$87,771	\$87,771	\$29,257	\$58,514	\$58,514	\$58,514		\$476,378
900	\$22,260	\$22,260	\$22,260	\$29,257	\$87,771	\$87,771	\$29,257	\$58,514	\$58,514	\$58,514		\$476,378
800	\$23,664	\$23,664	\$23,664	\$11,832	\$35,496	\$35,496	\$11,832	\$23,664	\$23,664	\$23,664		\$236,640
700	\$23,664	\$23,664	\$23,664	\$11,832	\$35,496	\$35,496	\$11,832	\$23,664	\$23,664	\$23,664		\$236,640
600	\$26,384	\$26,384	\$26,384	\$13,192	\$39,576	\$39,576	\$13,192	\$26,384	\$26,384	\$26,384		\$263,840
500	\$26,384	\$26,384	\$26,384	\$13,192	\$39,576	\$39,576	\$13,192	\$26,384	\$26,384	\$26,384		\$263,840
400	\$20,264	\$20,264	\$20,264	\$10,132	\$30,396	\$30,396	\$10,132	\$20,264	\$20,264	\$20,264	N	\$202,640
300 200	\$20,264 \$21,216	\$20,264 \$21,216	\$20,264 \$21,216	\$10,132 \$1,239	\$30,396 \$7,434	\$30,396 \$7,434	\$10,132 \$1,239	\$20,264 \$21,216	\$20,264 \$21,216	\$20,264 \$21,216	E	\$202,640 \$144,642
100	\$21,216	\$21,216	\$21,216	\$1,239	φ7,434 <b>1</b>		\$1,239	\$21,216	\$21,216	\$21,216	W	\$129,774
			-									
6,400	\$97,376	\$97,376	\$97,376	\$9,121	\$27,363	\$27,363	\$9,121	\$97,376	\$97,376	\$97,376	R	\$657,224
6,000	\$139,791	\$139,791	\$139,791	\$12,929	\$38,787	\$38,787	\$12,929	\$139,791	\$139,791	\$139,791	U	\$942,178
5,500	\$111,775	\$111,775	\$111,775	\$12,460	\$37,380	\$37,380	\$12,460	\$111,775	\$111,775	\$111,775	N	\$770,330
5,000	\$65,671	\$65,671	\$65,671	\$13,314	\$39,942	\$39,942	\$13,314	\$65,671	\$65,671	\$65,671	W	\$500,538
4,500	\$100,589	\$100,589	\$100,589	\$14,693	\$44,079	\$44,079	\$14,693	\$100,589	\$100,589	\$100,589	Α	\$721,078
4,000	\$54,026	\$54,026	\$54,026	\$27,125	\$81,375	\$81,375	\$27,125	\$54,026	\$54,026	\$54,026	Y	\$541,156
3,500	\$2,482	\$2,482	\$2,482	\$49,553	\$148,659	\$148,659	\$49,553	\$2,482	\$2,482	\$2,482		\$411,316
3,000	\$9,979	\$9,979	\$9,979	\$36,155	\$108,465	\$108,465	\$36,155	\$9,979	\$9,979	\$9,979	S	\$349,114
2,500	\$78,574	\$78,574	\$78,574	\$13,902	\$41,706	\$41,706	\$13,902	\$78,574	\$78,574	\$78,574	Α	\$582,660
2,000	\$50,643	\$50,643	\$50,643	\$12,362	\$37,086	\$37,086	\$12,362	\$50,643	\$50,643	\$50,643	F	\$402,754
1,500	\$68,813	\$68,813	\$68,813	\$12,047	\$36,141	\$36,141	\$12,047	\$68,813	\$68,813	\$68,813	E	\$509,252
1,000	\$65,739	\$65,739	\$65,739	\$14,728	\$44,184	\$44,184	\$14,728	\$65,739	\$65,739	\$65,739	Т	\$512,258
500	\$24,225	\$24,225	\$24,225	\$25,970	\$77,910	\$77,910	\$25,970	\$24,225	\$24,225	\$24,225	Y	\$353,110
100	\$22,005	\$22,005	\$22,005	\$7,088	0	1	\$7,088	\$22,005	\$22,005	\$22,005	1	\$146,204
200	\$22,005	\$22,005	\$22,005	\$7,088	\$42,525	\$42,525	\$7,088	\$22,005	\$22,005	\$22,005	Α	\$231,254
300	\$58,174	\$58,174	\$58,174	\$3,920	\$11,760	\$11,760	\$3,920	\$58,174	\$58,174	\$58,174	R	\$380,404
400	\$58,174	\$58,174	\$58,174	\$3,920	\$11,760	\$11,760	\$3,920	\$58,174	\$58,174	\$58,174	E	\$380,404
500	\$67,286	\$67,286	\$67,286	\$33,643	\$100,929	\$100,929	\$33,643	\$67,286	\$67,286	\$67,286	Α	\$672,860
600	\$67,286	\$67,286	\$67,286	\$33,643	\$100,929	\$100,929	\$33,643	\$67,286	\$67,286	\$67,286		\$672,860
700	\$88,638	\$88,638	\$88,638	\$44,319	\$132,957	\$132,957	\$44,319	\$88,638	\$88,638	\$88,638		\$886,380
800	\$88,638	\$88,638	\$88,638	\$44,319	\$132,957	\$132,957	\$44,319	\$88,638	\$88,638	\$88,638		\$886,380
900	\$136,432	\$136,432	\$136,432	\$68,216	\$204,648	\$204,648	\$68,216	\$136,432	\$136,432	\$136,432		\$1,364,318
1,000	\$136,432	\$136,432	\$136,432	\$68,216	\$204,648	\$204,648	\$68,216	\$136,432	\$136,432	\$136,432		\$1,364,318
SUMS	\$1,842,328				\$2,100,101	\$2,100,101	\$700,034	\$1,914,836	\$1,914,836	\$1,914,836		

## **ALTERNATIVE C-1**

# RUNWAY 1/19 SAFETY AREA EVALUATION

					1000							100
					ANCE FROM							
	250	200	150	100	75	75	100	150	200	250		
1,000	\$42,589	\$42,589	\$42,589	\$21,295	\$63,884	\$63,884	\$21,295	\$42,589	\$42,589	\$42,589		\$425,894
900	\$15,256	\$15,256	\$15,256	\$7,628	\$22,883	\$22,883	\$7,628	\$15,256	\$15,256	\$15,256		\$152,556
800	\$17,420	\$17,420	\$17,420	\$8,710	\$26,130	\$26,130	\$8,710	\$17,420	\$17,420	\$18,323		\$175,104
700	\$17,681	\$17,681	\$17,681	\$8,840	\$26,521	\$26,521	\$8,840	\$17,681	\$17,681	\$33,949		\$193,077
600	\$18,098	\$18,098	\$18,098	\$9,049	\$27,147	\$27,147	\$9,049	\$18,098	\$18,098	\$48,884		\$211,767
500	\$19,976	\$19,976	\$19,976	\$9,988	\$29,964	\$29,964	\$9,988	\$19,976	\$19,976	\$35,775	N	\$215,556
400 300	\$22,662 \$25,348	\$22,662 \$25,348	\$22,662	\$11,331 \$12,674	\$33,993 \$38,022	\$33,993 \$38,022	\$11,331	\$22,662	\$22,662 \$25,348	\$22,662 \$25,348	E	\$226,618 \$253,478
200	\$25,346	\$25,346	\$25,348 \$27,225	\$13,613	\$40,838	\$40,838	\$12,674 \$13,613	\$25,348 \$27,225	\$27,225	\$27,225	w	\$253,476
100	\$45,715	\$45,715	\$45,715	\$22,857	\$40,030 <b>1</b>		\$22,857	\$45,715	\$45,715	\$45,715	**	\$320,003
1000000	\$157,694	\$157,694			\$259	\$259	\$78,847		\$157,694	\$157,694	R	\$1,104,374
6,400	\$157,694	\$116,204	\$157,694 \$116,204	\$78,847 \$58,102	\$10,665	\$10,665	\$58,102	\$157,694 \$116,204	\$116,204	\$157,694	U	\$834,754
5,500	\$117,351	\$117,351	\$117,351	\$58,676	\$19,562	\$19,562	\$58,676	\$117,351	\$117,351	\$117,351		\$860,580
5,000	\$80,711	\$80,711	\$80,711	\$40,356	\$26,306	\$26,306	\$40,356	\$80,711	\$80,711	\$80,711	N	\$617,592
4,500	\$47,097	\$47,097	\$47,097	\$23,548	\$33,831	\$33,831	\$23,548	\$47,097	\$47,097	\$47,097	W	\$329,678
4,000	\$82,563	\$82,563	\$82,563	\$41,281	\$42,308	\$42,308	\$41,281	\$82,563	\$82,563	\$82,563	A	\$662,557
3,500	\$22,766	\$22,766	\$22,766	\$11,383	\$91,770	\$91,770	\$11,383	\$22,766	\$22,766	\$22,766	Υ	\$342,903
3,000	\$1,460	\$1,460	\$1,460	\$730	\$135,877	\$135,877	\$730	\$1,460	\$1,460	\$1,460	s	\$281,977
2,500	\$10,223	\$10,223	\$10,223	\$5,111	\$82,915	\$82,915	\$5,111	\$10,223	\$10,223	\$10,223	A	\$237,388
2,000	\$74,687	\$74,687	\$74,687	\$37,344	\$26,271	\$26,271	\$37,344	\$74,687	\$74,687	\$74,687	F	\$575,354
1,500	\$29,807	\$29,807	\$29,807	\$14,904	\$20,486	\$20,486	\$14,904	\$29,807	\$29,807	\$29,807	E	\$249,621
1,000	\$82,693	\$82,693	\$82,693	\$41,347	\$15,855	\$15,855	\$41,347	\$82,693	\$82,693	\$82,693	T	\$610,563
500	\$44,567	\$44,567	\$44,567	\$22,284	\$17,728	\$17,728	\$22,284	\$44,567	\$44,567	\$44,567	Y	\$347,426
100	\$2,869	\$2,869	\$2,869	\$1,434	0	1	\$1,434	\$2,869	\$2,869	\$2,869		\$20,080
200	\$3,234	\$3,234	\$3,234	\$1,617	\$7,483	\$7,483	\$1,617	\$3,234	\$3,234	\$3,234	Α	\$37,602
300	\$5,868	\$5,868	\$5,868	\$2,934	\$2,926	\$2,926	\$2,934	\$5,868	\$5,868	\$5,868	R	\$46,925
400	\$11,474	\$11,474	\$11,474	\$5,737	\$1,974	\$1,974	\$5,737	\$11,474	\$11,474	\$11,474	E	\$84,268
500	\$18,568	\$18,568	\$18,568	\$9,284	\$1,197	\$1,197	\$9,284	\$18,568	\$18,568	\$18,568	A	\$132,367
600	\$24,800	\$24,800	\$24,800	\$12,400	\$37,200	\$37,200	\$12,400	\$24,800	\$24,800	\$24,800		\$248,002
700	\$34,058	\$34,058	\$34,058	\$17,029	\$51,087	\$51,087	\$17,029	\$34,058	\$34,058	\$34,058		\$340,579
800	\$59,588	\$59,588	\$59,588	\$29,794	\$89,382	\$89,382	\$29,794	\$59,588	\$59,588	\$59,588		\$595,882
900	\$90,595	\$90,595	\$90,595	\$45,297	\$135,892	\$135,892	\$45,297	\$90,595	\$90,595	\$90,595		\$905,950
1,000	\$83,502	\$83,502	\$83,502	\$41,751	\$125,253	\$125,253	\$41,751	\$83,502	\$83,502	\$83,502		\$835,018
SUMS	\$1,454,348	\$1,454,348	\$1,454,348	\$727,174	\$1,285,608	\$1,285,608	\$727,174	\$1,454,348	\$1,454,348	\$1,518,104		

Appendix K - RSA Practicability Study

### ALTERNATIVE A

1,000	250	000			DISTANCE FROM						-
1.000		200	150	100	75	75	100	150	200	250	
900											
800			<u> </u>		- 10	0-1-1-0					
700					Runway 19	Safety Area					
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5,500											•
5,000			-								١
			-			Downson					
4,500			-		New	Runway					
4,000		04.004.457	-					00.000.107			
3,500		\$4,664,157	-					\$2,996,197			ı
3,000			-								
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500					Runway 0	Safety Area					1
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800							- 10,00				1
900											1
1,000		-									1
SUMS		\$4,664,157			60.4	41,387		\$2,996,197			+

### **ALTERNATIVE B**

						R/W CENTERLINI				
	250	200	150	100	75	75	100	150	200	250
1,000										
900			-							
800 700			-		Dunway 10	Cofoty Area				
600			<del> </del>		nuriway 18	Safety Area				
500					\$1,7	47,600				
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6,000										
5,500										
5,000										
4,500					New	Runway				
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300			1							
400					+					
500					Bunway 0	1 Safety Area				
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800	-		1							
900										
1,000										
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SUMS		\$4,292,588			\$8,3	386,916		\$4,292,588		

### ALTERNATIVE C

						R/W CENTERLINI					
	250	200	150	100	75	75	100	150	200	250	
1,000											
900											
800	+				Dumwey 16	Cofoty Area					ı
700					Runway 18	Safety Area					ı
600			-		\$2,6	33,412					ı
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900											1
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1,000											+
SUMS		\$3,626,484			\$9,6	518,794		\$3,626,484			

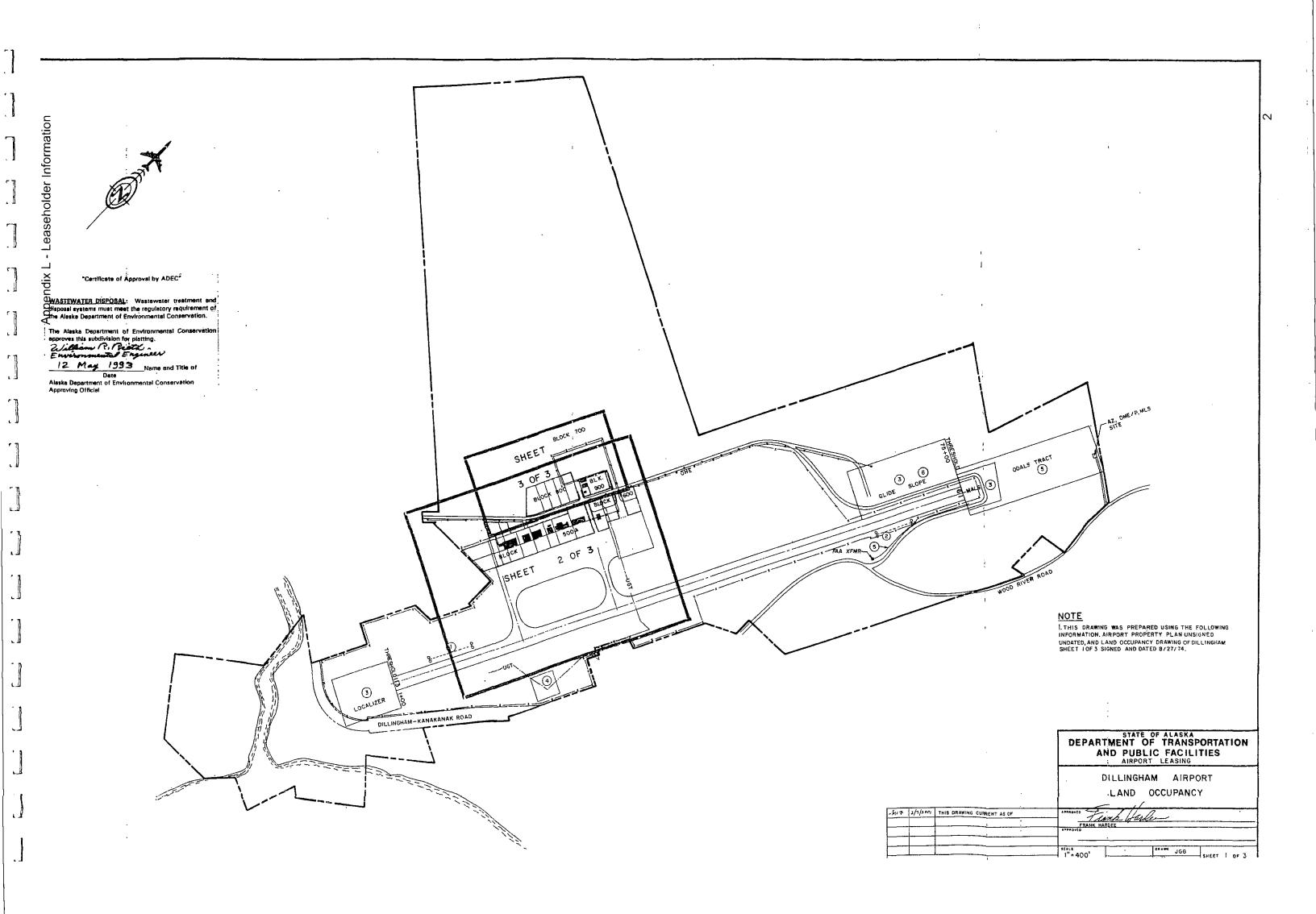
## **ALTERNATIVE C-1**

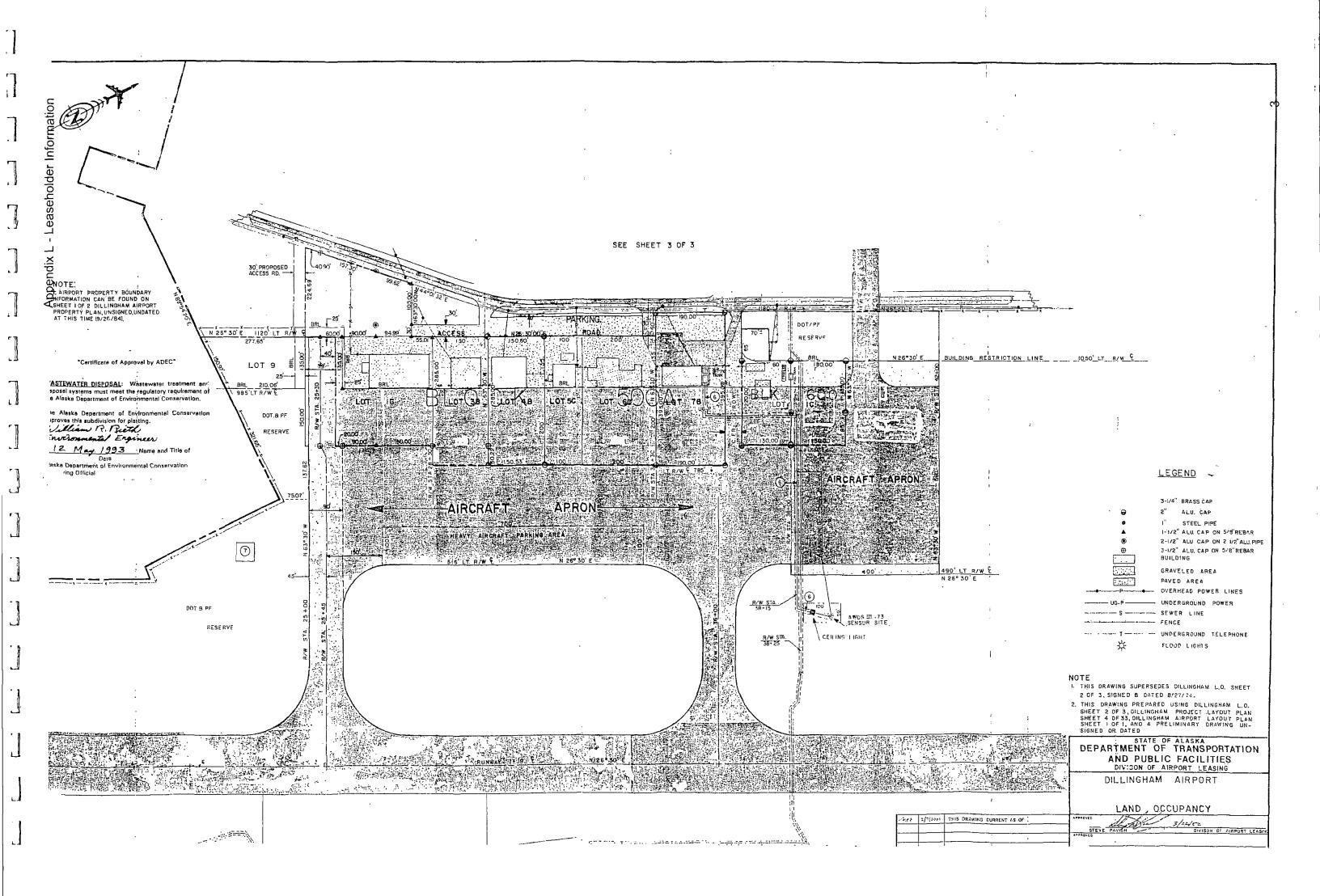
	250	200	150	100	75	R/W CENTERLINE	100	150	200	250	-
1,000	200	200	150	100	13	75	100	130	200	230	-
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600					\$3,2	246,672					1
700	-		-								1
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900			-								1
1,000											1
SUMS		\$3,561,214			\$5,6	692,980		\$3,561,214			

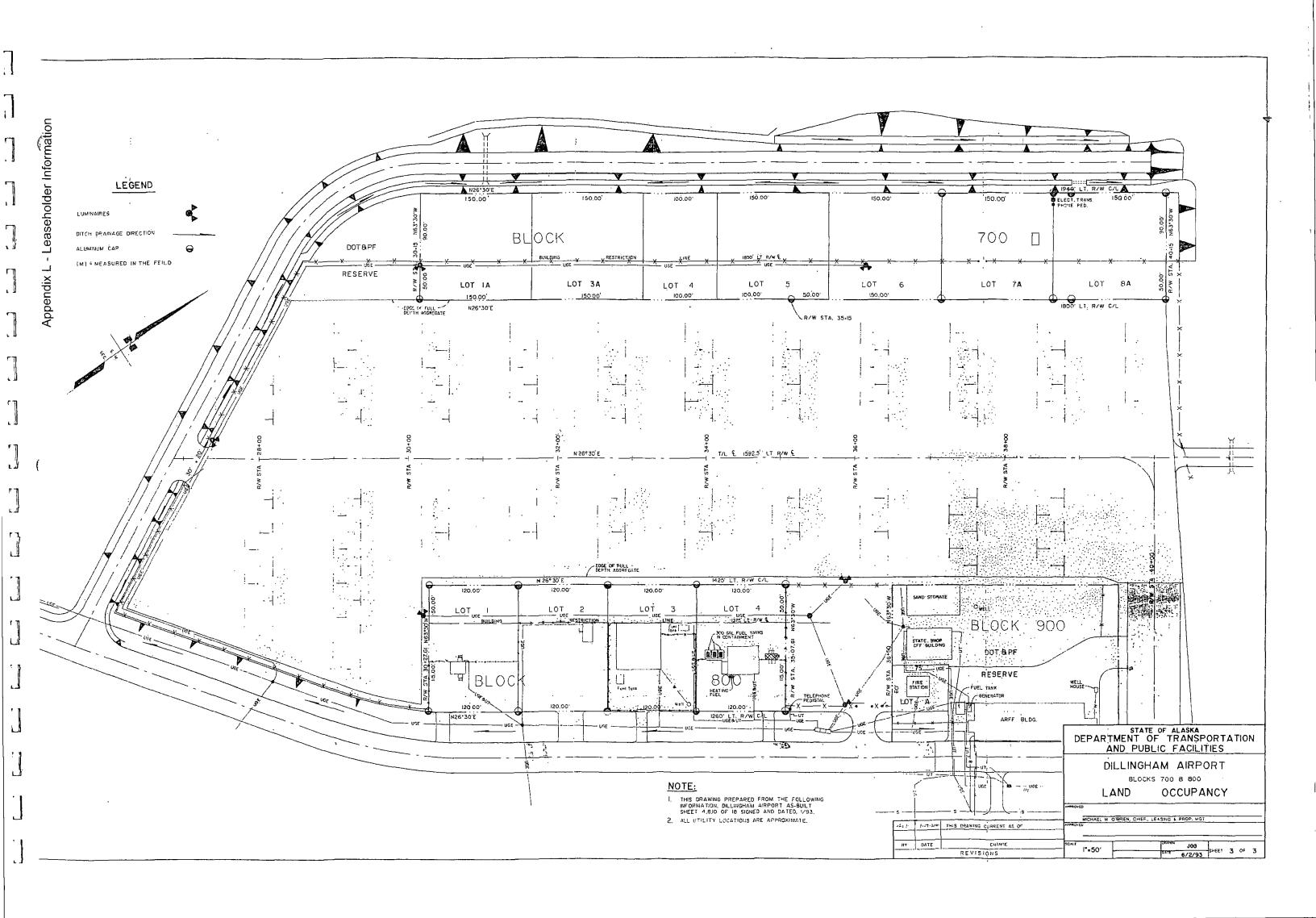
# APPENDIX L LEASEHOLDER INFORMATION

## Dillingham

BLOCK	LOT	ADA	AREA (sq. ft.)	CURRENT TENANT	EXPIRES	SHEET
500A	1G	07789	116,655.15	Phillip & Demptha Bingman	06/30/2035	2
500A	3B	07779	50,250	Phillip & Demptha Bingman	08/31/2025	2
500A	4B	02601R	49,500	ARMSTRONG AIR SERVICE, INC.	05/31/2012	2
500A	5C	03791	33,500	Peninsula Airways Inc	06/30/2004	2
500A	6C	03818	67,000	STARFLITE, INC.	08/01/2014	2
500A	7B	02940	75,050	Grant Aviation, Inc	07/01/2014	2
600	1C	07900	67,750	Consultants & Services Inc DBA Alaska Cargo S	09/30/2011	2
700	1A	07879	21,000	TIKCHIK NARROWS LODGE, INC.	07/07/2006	3
700	3A		21,000	*VACANT*		3
700	4		14,000	*VACANT*		3
700	5		21,000	*VACANT*		3
700	6		21,000	*VACANT*		3
700	7A		21,000	VACANT		3
700	8A	07070	21,000	LEON BRASWELL d/b/a MULCHATNA AIR	10/21/2006	3
800	1	07472	19,800.00	TOGIAK TRANSPORTATION, INC	01/07/2003	3
800	2	07196	19800	BRISTOL BAY AIR SERVICE, INC.	10/26/2010	3
800	3	06825	19801	US FISH & WILDLIFE SERVICE	10/15/1927	3
800	4	06765	19,798.70	TUCKER AVIATION	10/14/2017	3
900				DOT/PF		2
900	PR A	07809	4,500	CITY OF DILLINGHAM	11/30/2005	2
Item	1	06504		FAA (VASI)	09/30/2010	1
Item	2	07092		FAA (VASI)	09/30/2014	1
Item	3	07092		FAA (MALS, GLIDE SLOPE, LOCALIZER)	09/30/2014	1
Item	4	06621		FAA (UHF/VHF/DF SITE)	09/30/2011	1
Item	5	05757		FAA (ODALS SITE, 10' CABLE ROW)	INDEF.	1
Item	6	07263	5,000	NWS (AMOS SITE, 10' ROW)	05/31/2006	2
Item	7	06669	2,500	FAA (AWOS)	09/30/2012	2







APPENDIX M
COST ESTIMATES

Capital Improvement Program - Dillingham Airport	Total Cost	Eligible for AIP	State Match
		Funding	for AIP
Phase I: Short Term (2004 - 2008)			
Parallel Taxiway	\$5,052,701	\$4,736,907	\$315,794
Acquire Land South of Terminal Area	\$1,080,000	\$1,012,500	\$67,500
Acquire Land within Existing and Future RPZs	\$6,420,000	\$6,018,750	\$401,250
Build Chemical Storage Building	\$1,386,000	\$1,299,375	\$86,625
Expand Vehicle Parking at South End of Terminal Area	\$647,145	\$606,698	\$40,447
Build RSA Embankment	\$16,511,689	\$15,479,708	\$1,031,981
Şubtotal	\$31,097,535	\$29,153,939	\$1,943,596
Phase II: Intermediate Term (2009 - 2013)			
Relocate Runway, Complete Parallel Taxiway & RSA	\$6,459,041	\$6,055,351	\$403,690
Realign Wood River Road	\$804,270	\$754,003	\$50,267
Install MALSR	\$568,000	\$532,500	\$35,500
Apron & Taxiway Pavement Rehabilitation	\$1,390,347	\$1,303,450	\$86,897
West Apron Expansion	\$2,153,083	\$2,018,515	\$134,568
Build Heliport	\$49,590		\$3,099
Pave GA Apron	\$935,250	\$876,797	\$58,453
Crosswind Runway Phase I	\$2,271,860	\$2,129,869	\$141,991
Equipment Allowance	\$250,000	\$234,375	\$15,625
Subtotal	\$14,881,441	\$13,951,351	\$930,090
Phase III: Long Term (2014-2023)			
South Apron Expansion	\$2,268,443	\$2,126,665	\$141,778
Terminal Road & Parking Improvements	\$224,775	\$210,727	\$14,048
Crosswind Runway Phase II	\$5,524,090	\$5,178,834	\$345,256
Install MALSR	\$568,000	\$532,500	\$35,500
Master Plan Update	\$450,000	\$421,875,	\$28,125
Equipment Allowance	\$1,100,000	\$1,031,250	\$68,750
Subtotal	\$10,135,307	\$9,501,851	\$633,457
TOTAL	\$56,114,283	\$52,607,140	\$3,507,143

#### Short Term Cost Summary (2004 - 2008)

ltem	Cost
Parallel Taxiway	\$5,052,701
Acquire Land South of Terminal Area*	\$1,080,000
Acquire Land within Existing and Future RPZs*	\$6,420,000
Build Chemical Storage Building**	\$1,386,000
Expand Vehicle Parking at South End of Terminal Area	\$647,145
Build RSA Embankment	\$16,511,689

Total all Projects Cost \$31,097,535

#### **Notes and Assumptions**

- 1. Existing runway is assumed to have a similar cross section to the new runway (depth at shoulder is assumed to be 5 feet with 2% average slopes on R/W and RSA and 4:1 slopes on edges.
- 2. Recycled Asphalt Paving (RAP) will be used in place of Crushed Aggregate Surface Course where applicable. Situations are noted by using CASC (RAP) in item list.
- 3. Asphalt removed is assumed to be 4" thick; leveling course is assumed to be left in place
- 4. Unclassified excavation is assumed to be a vertical cut directly under the footprint of the new construction
- 5. Assume waste material is disposed of on airport property
- 6. Assume that non-organic material with more than 12% minus 200 obtained from excavation will be used in fills at depths more than 5', and will only be paid as excavation.
- See "Dillingham Airport Conceptual Relocation Study, May 2005"
- \*\* See "Dillingham Chemical Storage Building" Estimated Cost Summary

Runway Safety Area Improvements	Quantity	Unit Price	Unit	Total
Base Course	23,050	\$27.00	CY	\$622,350
Clearing and Grubbing	68	\$4,700.00	ACRE	\$319,600
Unclassified Excavation	145,000	\$5.00	CY	\$725,000
Geofabric, Separation	375,000	\$1.20	SY	\$450,000
Culverts	300	\$135.00	LF	\$40,500
Štructural Fill	728,500	\$13.00	CY	\$9,470,500

Total Direct Costs \$11,627,950

Total Indirect Costs (12% TDC) \$1,395,354

Contingency (15% TDC) \$1,744,193

Engineering & Construction Management (15% TDC) \$1,744,193

Total \$16,511,689

Vehicle Parking	Quantity	Unit Price	Unit	Total
Parking Area	-			<u> </u>
Pavement Markings	ALL REQ'D	\$1,000.00	ĹS	\$1,000
Structural Fill	19,400	\$13.00	CY	\$252,200
Base Course	1,600	\$27.00	CY	\$43,200
Asphalt Pavement	2,100	\$50.00	TON	\$105,000
Clearing and Grubbing	2	\$4,700.00	ACRE	\$9,400
Unclassified Excavation	1,150	\$5.00	CY	\$5,750
Geofabric, Separation	12,400	\$1.20	SY	\$14,880
			otal Direct Costs	\$431,430
		Total Indirect (	Costs (20% TDC)	\$86,286
		ency (15% TDC)	\$64,715	
	Engineering & Construction Management (15% TDC)			\$64,7 <u>15</u>
			Total =	\$647,145

Parallel Taxiway (First 3900' only)	Quantity	Unit Price	Unit	Total
Pavement Markings	ALL REQ'D	\$14,444.44	LS	\$14,444
Structural Fill	166,617	\$13.00	CY	\$2,166,017
Base Course	10,219	\$27.00	ĊY	\$275,925
Asphalt Pavement	13,506	\$50.00	TON	\$675,278
Remove Asphalt Paving	5,561	\$3.50	SY	\$19,464
Medium Intensity Taxiway Lighting	ALL REQ'D	\$99,305.56	LS	\$99,306
Clearing and Grubbing	13`	\$4,700.00	ACRE	\$61,100
Unclassified Excavation	1,156	\$5.00	CY	\$5,778
Geofabric, Separation	70,633	\$1,20	SY	\$84,760
Culverts	477	\$135.00	LF	\$64,350
Seeding	4.6	\$4,000.00	ACRE	\$18,200

Total Direct Costs	\$3,484,621
Total Indirect Costs (15% TDC)	\$522,693
Contingency (15% TDC)	\$522,693
Engineering & Construction Management (15% TDC)	\$522,693
	0.

Total \$5,052,701

#### Intermediate Term Cost Summary (2009-2013)

Item	Cost
Relocate Runway, Complete Parallel Taxiway & RSA	\$6,459,041
Realign Wood River Road	\$804,270
Install MALSR	\$568,000
Apron & Taxiway Pavement Rehabilitation	\$1,390,347
West Apron Expansion	\$2,153,083
Build Heliport	\$49,590
Pave GA Apron	\$935,250
Crosswind Runway Phase I	\$2,271,860
Equipment Allowance*	\$250,000

Total all Projects Cost \$14,881,441

**Notes and Assumptions** 

- 1. Existing runway is assumed to have a similar cross section to the new runway (depth at shoulder is assumed to be 5 feet with 2% average slopes on R/W and RSA and 4:1 slopes on edges.
- 2. Recycled Asphalt Paving (RAP) will be used in place of Crushed Aggregate Surface Course where applicable. Situations are noted by using CASC (RAP) in item list.
- 3. Asphalt removed is assumed to be 4" thick; leveling course is assumed to be left in place
- 4. Unclassified excavation is assumed to be a vertical cut directly under the footprint of the new construction
- 5. Assume waste material is disposed of on airport property
- 6. Assume that non-organic material with more than 12% minus 200 obtained from excavation will be used in fills at depths more than 5', and will only be paid as excavation.
- 7. Heliport edge lighting is assumed to be \$1,000 per light with an estimated 16 lights.
- \* Equipment allowance based on one deicing truck

telocate Runway, Complete RSA	Quantity	Unit Price	Unit	Total	
Pavement Markings and Grooving	ALL REQ'D	\$400,000.00	LS	\$400,000	
Asphalt Pavement	30,400	\$50.00	TON	\$1,520,000	
Remove Asphalt Paving	107,300	\$3.50	SY	\$375,550	
High Intensity R/W Lighting System	ALL REQ'D	\$550,000.00	LS.	\$550,000	
Rotating Beacon (Runway 1/19)	1	\$16,500.00	EACH	\$16,500	
Remove ODALS	ALL REQ'D	\$35,000.00	LS	\$35,000	
Remove VASI	ALL REQ'D	\$16,500.00	LS	\$16,500	
Segmented Circle	ALL REQ'D	\$35,000.00	LS	\$35,000	
Remove and Reset AWOS	ALL REQ'D	\$50,000.00	LS	\$50,000	
Remove and Reset Localizer	ALL REQ'D	\$137,500.00	LS	\$137,500	
Seeding	11	\$4,000.00	ACRE	\$44,000	
omplete Parallel Taxiway (Last 1500')	Quantity	Unit Price	Unit	Total	
Pavement Markings	ALL REQ'D	\$5,555.56	LS	\$5,556	
Structural Fill	64,083	\$13.00	CY	\$833,083	
Base Course	3,931	\$27.00	CY	\$106,125	
Asphalt Payement	5,194	\$50.00	TON	\$259,722	
Remove Asphalt Paving	2,139	\$3.50	SY	\$7,486	
Medium Intensity Taxiway Lighting	ALL REQ'D	\$38,194.44	LS	\$38,194	
Clearing and Grubbing	5	\$4,700.00	ACRE	\$23,500	
Unclassified Excavation	444	\$5.00	CY	\$2,222	
Geofabric, Separation	27,167	\$1.20	SY	\$32,600	
Culverts	183	\$135.00	LF	\$24,750	
Seeding	1.8	\$4,000.00	ACRE	\$7,000	
		7	otal Direct Costs	\$4,520,289	
		Total Indirect Costs (13% TDC)			
	Contingency (15% TDC) \$6				
	Engineering & Co	onstruction Manage		\$678,043	
		·	Total	\$6,459,041	

Realign Wood River Rd.	Quantity	Unit Price	Unit	Ţotal
Pavement Markings	ALL REQ'D	\$2,000.00	LS	\$2,000
Structural Fill	16,000	\$13.00	CY.	\$208,000
Base Course	1,900	\$27.00	CY	\$51,300
Asphalt Pavement	1,300	\$50.00	TON	\$65,000
Clearing and Grubbing	5	\$4,700.00	ACRE	\$23,500
Geofabric, Separation	32,400	\$1.20	SY	\$38,880
Culverts	500	\$135.00	LF	\$67,500
Land Acquisition	0.00	\$1,500.00	ACRE	\$0
Unclassified Excavation	16,000	\$5.00		\$80,000
			Total Direct Costs	\$536,180
		Total Indirect Costs (20% TDC)		
	Contingency (15% TDC)			\$80,427
	Engineering & Co	onstruction Manage	ement (15% TDC)_	\$80,427
			Total	\$804,270

Install MALSR	Quantity	Unit Price	Unit	Total
Install MALSR Approach Lighting	ALL REQ'D	\$400,000.00	LS	\$400,000
		To	otal Direct Costs	\$400,000
		Total Indirect C	osts (12% TDC)	\$48,000
		Continge	ency (15% TDC)	\$60,000
	Engineering & Co	onstruction Manager	nent (15% TDC)	\$60,000
			Total	\$568,000

Apron & Taxiway Pavement Rehabilitation	Quantity	Unit Price	Unit	Total
Pavenment Planing	105,420	\$1.50	LS	\$158,130
3" AC Overlay	17,794	\$45.00	Ton	\$800,730
		· · · · · · · · · · · · · · · · · · ·	otal Direct Costs	\$958,860
		Total Indirect C	Costs (15% TDC)	\$143,829
		Conting	ency (15% TDC)	\$143,829
	Engineering & Construction Management (15% TDC)			\$143,829
			Total	\$1 390 347

West Apron Expansion	Quantity	Unit Price	Unit	Total
Pavement Markings	ALL REQ'D	\$1,000.00	LS	\$1,000
Structural Fill	88,900	\$13.00	CY	\$1,155,700
Base Course ·	2,800	\$27.00	CY	\$75,600
Asphalt Pavement	3,700	\$50.00	TON	\$185,000
Clearing and Grubbing	9	\$4,700.00	ACRE	\$42,300
Geofábřić, Separation	21,904	\$1.20	SY	\$26,285
			Total Direct Costs	\$1,484,885
		Total Indirect (	Costs (15% TDC)	\$222,733
Contingency (15% TDC)				\$222,733
	Engineering & Construction Management (15% TDC)			
			Total =	\$2,153,083

Heliport	Quantity	Unit Price	Unit	Total	
Pavement Markings and Grooving	ALL REQ'D	\$2,000.00	LS	\$2,000	
Install Edge Lighting	1	\$16,000.00	LS	\$16,000	
Structural Fill	500	\$13.00	CA	\$6,500	
Asphalt Pavement	100	\$50.00	TON	\$5,000	
Base Course	100	\$27.00	CY	\$2,700	
Unclassified Excavation	400	\$5.00	CY	\$2,000	
		T	otal Direct Costs	\$34,200	
		Total Indirect C	osts (15% TDC)	\$5,130	
	Contingency (15% TDC)				
	Engineering & Co	onstruction Manager	ment (15% TDC) _	\$5,130	
			Total	\$49,590	

ve GA Apron	Quantity	Unit Price	Unit	Total
Pavement Markings	ALL REQ'D	\$2,000.00	LS	\$2,000
Asphalt Pavement	12,500	\$50.00	TON	\$625,000
Install Additional Lighting	1	\$18,000.00	LS	\$18,000
	<del> </del>	T	otal Direct Costs	\$645,000
		Total Indirect C	osts (15% TDC)	\$96,750
		Conting	ency (15% TDC)	\$96,750
	Engineering & Co	onstruction Manager	ment (15% TDC)_	\$96,750
			Total	\$935,250

Crosswind Runway (First Half)	Quantity	Unit Price	Unit	Total
Crosswind Runway				
Structural Fill	100,000	\$13.00	CY	\$1,300,000
Crushed Aggregate Surface Course (RAP)	2,450	\$13.00	CY	\$31,850
Medium Intensity Runway Lighting	ALL REQ'D	\$137,500.00	LS	\$137,500
Clearing and Grubbing	7	\$4,700.00	ACRE	\$30,550
Unclassified Excavation	600	\$5.00	CY	\$3,000
Geofabric, Separation	30,750	\$1.20	SÝ	\$36,900
Culverts	200	\$135.00	LF	\$27,000
	· · · · · · · · · · · · · · · · · · ·	Т	otal Direct Costs	\$1,566,800
		Total Indirect C	Costs (15% TDC)	\$235,020
		\$235,020		
	Engineering & Co	onstruction Manage	ment (15% TDC)_	\$235,020
			Total	\$2 271.860

#### Long Term Cost Summary (2014-2023)

Item		Cost
South Apron Expansion		\$2,268,443
Terminal Road & Parking Improvements		\$224,775
Crosswind Runway Phase II		\$5,524,090
Install MALSR		\$568,000
Master Plan Update*		\$450,000
Equipment Allowance**		\$1,100,000
	Total all Projects Cost	\$10,135,307

#### **Notes and Assumptions**

- 1. Existing runway is assumed to have a similar cross section to the new runway (depth at shoulder is assumed to be 5 feet with 2% average slopes on R/W and RSA and 4:1 slopes on edges.
- 2. Recycled Asphalt Paving (RAP) will be used in place of Crushed Aggregate Surface Course where applicable. Situations are noted by using CASC (RAP) in item list.
- 3. Asphalt removed is assumed to be 4" thick; leveling course is assumed to be left in place
- 4. Unclassified excavation is assumed to be a vertical cut directly under the footprint of the new construction
- 5. Assume waste material is disposed of on airport property
- 6. Assume that non-organic material with more than 12% minus 200 obtained from excavation will be used in fills at depths more than 5', and will only be paid as excavation.
- \* Typical Master Plan Update cost
- \*\* Equipment Allowance based on one motor grader and one ARFF truck.

Apron Improvements	Quantity	Unit Price	Unit	Total	
Apron Expansion (North and South)					
Pavement Markings	ALL REQ'D	\$1,000.00	LS	\$1,000	
Structural Fill	40,000	\$13.00	CY	\$520,000	
Base Course	6,700	\$27.00	CY	\$180,900	
Asphalt.Pavement	8;800	\$50.00	TON	\$440,000	
Clearing and Grubbing	3	\$4,700.00	ACRE	\$14,100	
Unclassified Excavation	26,950	\$5.00	CY	\$134,750	
Geofabric, Separation	38,286	\$1.20	SY	\$45,943	
Remove Existing Buildings	15,250	\$15.00	SF	\$228,750	
· · · · · · · · · · · · · · · · · · ·		<del>-</del>	Total Direct Costs	\$1,564,443	
		Total Indirect Costs (15% TDC)			
	Contin	gency (15% TDC)	\$234,666		
	Engineering & Co	nstruction Manage	ement (15% TDC)	\$234,666	
			Total	\$2,268,443	

Passenger Terminal, Cargo Facilities, and Parking	Quantity	Unit Price	Unit	Total
Passenger Terminal and Cargo Facilties			<del></del>	
Structural Fill	9,700	\$13.00	CY	\$126,100
Clearing and Grubbing	2	\$4,700.00	ACRË	\$9,400
Unclassified Excavation	950	\$5.00	CY	\$4,750
Geofabric, Separation	8,000	\$1.20	SY	\$9,600
		<del>_</del>	Total Direct Costs	\$149,850
		Total Indirect (	Costs (20% TDC)	\$29,970
		Conting	gency (15% TDC)	\$22,478
	Engineering & Co	onstruction Manage	ment (15% TDC)	\$22,478
		÷	Total ==	\$224 775

Crosswind Runway (Second Half)	Quantity	Unit Price	Unit	Total
Crosswind Runway				
Structural Fill	100,000	\$13.00	CY	\$1,300,000
Crushed Aggregate Surface Course (RAP)	2,450	\$13.00	CY	\$31,850
Medium Intensity Runway Lighting	ALL REQ'D	\$137,500.00	LS	\$137,500
Clearing and Grubbing	7	\$4,700.00	ACRE	\$30,550
Unclassified Excavation	600	\$5.00	GY	\$3,000
Geofabric, Separation	30,750	\$1.20	SY	\$36,900
Culverts	200	\$135.00	LF	\$27,000
Parallel Taxiway and Taxilanes				
Structural Fill	153,350	\$13.00	CY	\$1,993,550
Crushed Aggregate Surface Course (RAP)	3,250	\$13.00	GY	\$42,250
Medium Intensity Taxiway Lighting	ALL REQ'D	\$100,000.00	LS	\$100,000
Clearing and Grubbing	·8	\$4,700.00	ACRE	\$37,600
Unclassified Excavation	350	\$5.00	CY	\$1,750
Geofabric, Separation	38,500	\$1.20	SY	\$46,200
Culverts	400	\$135.00	LF	\$54,000

Total Direct Costs	\$3,842,150
Total Indirect Costs (14% TDC)	\$529,295
Contingency (15% TDC)	\$576,323
Engineering & Construction Management (15% TDC)	\$576,323
Total	\$5,524,090

Install MALSR	Quantity	Unit Price	Unit	Total	
Install MALSR Approach Lighting	ALL REQ'D	\$400,000.00	LS	\$400,000	
		To	otal Direct Costs	\$400,000	
		Total Indirect C	osts (12% TDC)	\$48,000	
		Continge	ency (15% TDC)	\$60,000	
	Engineering & Co	Engineering & Construction Management (15% TDC)			
			Total =	\$568,000	

6/6/2005

## Dillingham Airport Conceptual Relocation Study - May 2005

### Introduction

The Alaska Department of Transportation and Public Facilities (DOT&PF) and the Federal Aviation Administration (FAA) initiated this project to update the Dillingham Airport Master Plan. The purpose is to recommend actions to correct safety and capacity deficiencies; identify facilities required to serve existing and future air traffic demand; and develop a phased implementation plan to improve the airport to meet forecasted aviation needs for the next 20 years.

The preferred alternative, Alternative A, moves the runway northward, and requires the acquisition of many homes and considerable obstruction removal. This alternative also requires the closure of North Airport Road.

The purpose of this report is to identify any businesses and residences that would have to be relocated for the project. The analysis examines the right-of-way requirements based on the proposed alternatives for the project. The relocations that would result from the Dillingham Airport Project are presented in this section.

### Residential Impacts

- There are 33 households or residences that may need to be relocated. The
  market value of each of these properties is estimated to fall into the range
  between \$118,000 and \$500,000. The median value of home owned is
  \$130,400, per Department of Commerce and Community Development
  community database online.
- There is one business, a tire repair shop, within the project area.

Replacement housing for sale or rent is expected to continue to be available through the relocation. A search of the internet, and communication with local realtors, demonstrate the residential property available, on the date of the preparation of this report, is of adequate supply. Based on the foregoing market information, we can assure that all relocates will be relocated to comparable properties. Estimated acquisition and relocation expenses for this project is \$7,500,000.

The population is 60.9% Alaska Native/Indian, 34.3% White Non-Hispanic, 3.5% Hispanic, 9.4% two or more races, 0.6% Black, and 0.6% other race. There is potentially 15 to 20 Native Allotments impacted by this project. Given the percentage of Alaska Natives in this community there does not appear to be an inordinate impact on any special groups, such as minorities, handicapped, or elderly or others.

There is concern in the community that there is limited housing within the city limits of Dillingham and the City could potentially lose part of its tax base. The City provided a spreadsheet depicting 16 of the 33 potential properties within the RSA acquisition zone as tax exempt.

It is anticipated that there is a tire repair business that will be relocated. There are currently business properties for sale in the area that may meet the owner's needs. It is possible that other businesses within the project corridor may be impacted. Based on the availability of similar properties, there would be sufficient availability of lease lots and lease space to relocate them if that should become necessary.

#### **Statement**

As a means of providing uniform and equitable treatment for those persons displaced, the government passed the "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970," and the "Uniform Relocation Act Amendments of 1987." This legislation provides for uniform and equitable treatment of persons displaced from their homes, businesses, or farms by federal and federally assisted programs and establishes uniform and equitable land acquisition policies for federal and federally assisted programs. Whenever acquiring real property for a program or project by a federal agency results in displacing anyone, the agency is required to reimburse displaced persons and provide relocation planning, assistance coordination, and advisory services. All relocatees will be reimbursed for costs resulting from the displacement such as costs associated with moving, difference in cost between the acquired dwelling and the comparable dwelling, and other incidental relocation expenses.

The DOT&PF Right-of-way Section has agents knowledgeable in all aspects of relocation who can handle all types of problems associated with the relocation of residents and their property. All property owners, without discrimination, would be compensated for their loss of property at fair market value and all displaced persons would be moved at no expense to them. Relocations will be conducted in accordance with the "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970" as amended, and relocation assistance would be made available to all businesses and residential property owners affected by the Dillingham Airport Project without discrimination.

### **New Project**

Name of Project: DILLINGHAM Chemical Storage Building

Region: C

Project JD #; 18512

PEB Score

Region Score:

65

Primary Sponsor: ADOT/PF

**Sponsor Contact:** 

Central Region

**BOROUGH: UNORGANIZED BOROUGH** 

Phone #:

Population: 2,373

Enplanements: 45,173

Construct a 3-Bay Chemical Storage Building, heated, with concrete floor. **Project Description:** 

Include 20,000 gallon E-36 storage tanks.

Alaska Airlines has started using the 737-400 replacing the 200 series. Project Justification: The 400 has a less forgiving engine design for sand or FOD ingestion. There is a statewide initiative to reduce the use of out of spec sand at all certified airports. Alaska Airlines has brought to our attention their concern over the large gradation of sand in current use at the Dillingham airport. In order to reduce the sand usage and provide better braking value, we are trying to change our operation to include liquid urea and E-36 deicing solution.

This project is needed to provide a safe storage and mixing area for liquid de-icing materials and equipment. The de-icing truck is a specialized piece of equipment that will greatly enhance operations and is an equipment nomination in this APEB. The chemical storage facility will provide a controlled environment minimizing the possibility of a spill or handling accident. We lack the room for this operation in our current SRE building. At present in Dillingham, we store the solid urea outside, Bags that are not sealed well leak and add to our burden financially.

We need a three bay building. One bay would be used to store tanks and mixing operations; the second bay would support the 4,000-gallon truck; the third bay would allow us to store the solid urea inside.

Land Status:

Fee simple, Avigation &

ALP Status: FAA approved 6-30-03

Hazard Easement

**Environmental:** 

CD probable

Design Status:

Planning estimate done by Av

Design

Total Federal Estimated Gosts: \$1,386,000

Scores:

### **Project Evaluation Criteria**

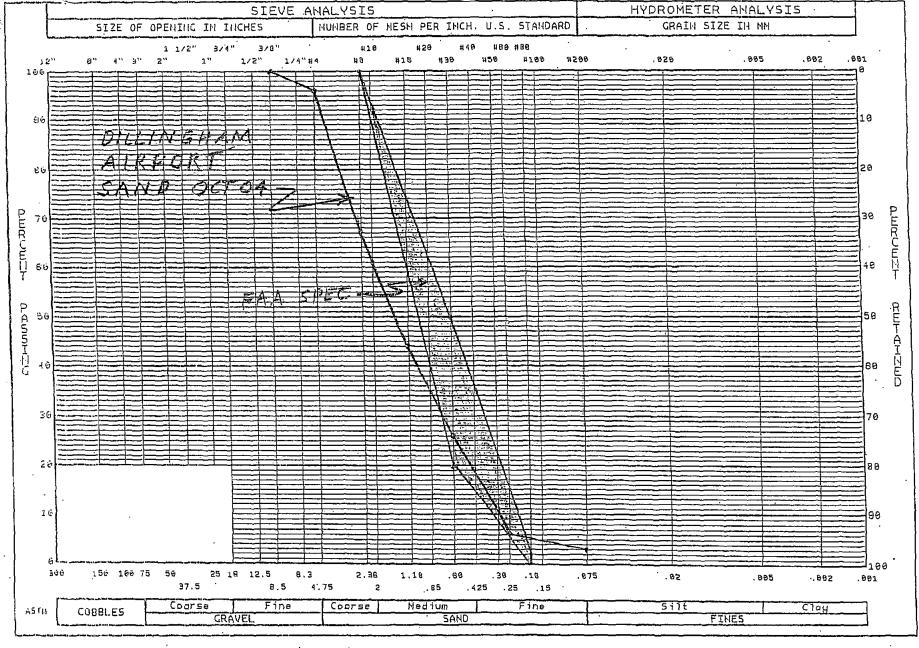
- 1. Safety of Existing Structure: NA, this is a new facility. [0]
- 2. Needs: The Dillingham airport is seeing a change in the aircraft fleet used by Alaska Airlines. The current technique of using urea to keep sand unfrozen is inadequate to meet the needs of Alaska Airlines 737-400 aircraft. Small clumps of frozen sand, acceptable with older jet aircraft, can be kicked up into the engine of the 737-400 aircraft. The use of liquid de-icing solution, applied by a De-icing Truck (nominated in this APEB), will eliminate the need for sand placement on the airfield area used by the 737-400. The Chemical Storage Building will be needed to house the De-icing Truck, store chemicals, and mix-chemicals to be used in de-icing the runway. [5]
- 3. Project Conditions: Probable project contractor mobilization cost sharing with other projects in the area. There are multiple projects planned and scheduled in the region in the FY 05-07 budget years. [5]
- 4. Appearance: NA, this is a new facility. [0]
- **5. Weather Conditions:** Special conditions exist continuously which result in increased problems due to exposure. Frequent rains, snow and icing conditions will expose the de-icing agents to the elements possibly diluting them and rendering them ineffective. [5]
- 6. Airfield Safety: Significant airfield safety improvements through use of protected equipment. Safety at the airport will be greatly enhanced with de-icing capabilities by removing ice from the runway through a wider temperature range allowing for longer and more frequent ice free operations. The building will protect the equipment and materials from exposure to the salt spray and moisture common to coastal airports. [5]
- 7. Land Ownership: Property ownership adequate to construct the project. [0]
- 8. Other Factors Not Previously Evaluated: There is a statewide initiative to reduce the use of out of specification sand at all certified airports. Approximately 35% of the sand used at the Dillingham Airport is too large to meet the FAA specifications (see attached chart). FAA considers this out of spec sand to be Foreign Object Debris (FOD). Alaska Airlines has started using the 737-400 replacing the 200 series, and the 400 has a less forgiving engine design for sand or other FOD ingestion.

Alaska Airlines has brought to our attention their concern over the large gradation of sand in current use at the Dillingham airport. The current techniques of using urea are inadequate to meet the needs of Alaska Airlines' 737-400 aircraft. Small clumps of frozen sand, acceptable with older jet aircraft, can be kicked-up into the engine of the 737-400 aircraft potentially creating engine damage and hazardous aircraft operations. The use of liquid de-icing solution will minimize the need for sand placement on the airfields, such as Dillingham Airport, used by the 737-400.

The de-icing solution keeps the ice from bonding to the runway and will save time and other resources. In order to reduce the sand usage and provide better braking value, we are trying to change our operation to include liquid urea and E-36 de-icing solution. The equipment will minimize the risk of jet engine failure.

A De-icing truck w/ 4,000-gallon capacity is being nominated in this APEB, and it will allow for efficient application of the liquid urea chemical. The requested equipment will significantly improve productivity of maintenance operations and safety at the airport. This will result in a more uniform and longer lasting melt of ice on the runways. Liquid urea and potassium acetate are good preventative de-icing agents. They can be applied to wet runways to preclude freezing. Dillingham Airport will need a Chemical Storage Building to house the De-icing truck and related chemicals, and to mix the de-icing chemicals. This project is part of the new de-icing strategy. [5]

DILLING DAM



#### STIP

## Planning Estimate Scope, Schedule Estimate Confirmation

Project Name: DILLINGHAM Chemical Storage Building

Project Nomination Scope: Construct a 3-bay Chemical Storage Building with 20,000 gallon storage tanks. This will be a heated building with a concrete floor.

Project Nomination Estimate:	Year I	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Preliminary Engineering						,	
Utilities			•				
Right of Way		\$0					\$0
Construction				,			
Total (1000s)		\$0					\$0

.. Confirmed Scope:

Confirmed Scope, Schedule & Estimate prepared by:

Confirmed Scope, Schedule & Estimate approved by:

Construct a Chemical Storage Building with storage tank, mixing tank, and associated piping. This will be a heated building with a concrete floor.

						_	
Confirmed Project Costs:	Year I	Year 2	Year 3	Year 4	Year 5	Үеат б	Total
Preliminary Engineering	\$121						\$121
Utilities		\$0					\$0
Right of Way		\$0					. \$0
Construction		\$1,265	<u> </u>				\$1,265
Total (1000s)	\$121	\$1,265					\$1,386

Environmental Considerations:	•				
Type of Document Anticipated:	D PCE	⊠ CE	□ EA	☐ EIŞ	
4(f) Involvement:	Yes	⊠ No			·
Time to prepare Environmental Document:	3 months				
. Permits Required:	None				
Right of Way Considerations:	None				
Utility Considerations:	Service from.	existing powe	er.	. 1	

